

#### **Final**

# Remedial Investigation Report Operable Unit 1 - Former Export Plant Site Libby Asbestos Superfund Site Libby, Montana

August 3, 2009

Contract No. DTRT57-05-D-30109 **Task Order No. 00015** 

Prepared for:



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Section 7

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#### Abbreviations and Acronyms

ABS activity-based sampling

AHERA Asbestos Hazard Emergency Response Act of 1986
ARARS Applicable or Relevant and Appropriate Requirements
ATSDR Agency for Toxic Substances and Disease Registry

BNSF Burlington Northern and Santa Fe Railroad

bgs below ground surface
CDC Center for Disease Control
CE cumulative exposure
cm² square centimeters
CSF close support facility
CSM conceptual site model
CTE central tendency exposure

DEQ Montana Department of Environmental Quality

DQOs data quality objectives

EPC exposure point concentration

EF exposure frequency ET exposure time

f/cc fibers per cubic centimeter

FS feasibility study
Grace W.R. Grace Company

Grav gravimetric

IUR inhalation unit risk HQ hazard quotient

IARC International Agency for Research on Cancer ISO International Organization for Standardization

LA Libby amphibole

Libby Site Libby Asbestos Superfund Site

m<sup>3</sup> cubic meters

MDT Montana Department of Transportation

Millwork West Company

ND non-detect

NIOSH National Institute for Occupational Safety and Health

NMRD non-malignant respiratory disease
NAS National Academy of Sciences
NTP National Toxicology Program

OU1 operable unit 1

PCM phase contrast microscopy

PCME PCM-equivalent

PLM polarized light microscopy
PLM-9002 NIOSH Method 9002
PM particulate matter
QA quality assurance

QA/QC quality assurance/quality control

QC quality control



RfC reference concentration RI remedial investigation

RME reasonable maximum exposure s/cc structures per cubic centimeter

s/cc-yrs structures per cubic centimeter per year

s/cm<sup>2</sup> structures per square centimeter SAP sampling and analysis plan

site former Export Plant and all other areas contained within OU1

SQAPP sampling and quality assurance project plan

TEM transmission electron microscopy

TWF time weighting factor

TR trace

UAO Unilateral Administrative Order USGS United States Geological Survey

VE visual estimation

WHO World Health Organization

XRD x-ray diffraction yd³ cubic yards percent

≥ greater than or equal to

< less than

°F degrees Fahrenheit

μm micron

95UCL 95% upper confidence limit



## Section 1 Introduction

The purpose of this remedial investigation (RI) report is to present sufficient information to support a feasibility study (FS) and remedial action decisions for the former Export Plant Site (site), Operable Unit 1 (OU1) of the Libby Asbestos Superfund Site (Libby Site) in Libby, Montana.

This RI report includes a comprehensive description of the nature and extent of contamination and a description of past investigative and removal actions at the site, as well as the risk assessment, which presents estimates of the risks to human health posed by the contamination at the site. The subsequent FS report will use the information from the RI to perform a systematic analysis to determine the need for, and scope of, any required remedial action.

The main contaminant of concern at the site is asbestos. At the Libby Site, the form of asbestos that is present in the vermiculite deposit is an amphibole asbestos that for many years was classified as tremolite/actinolite (e.g., McDonald et al. 1986a, Amandus and Wheeler 1987). More recently, the United States Geological Survey (USGS) performed electron probe micro-analysis and x-ray diffraction analysis of 30 samples obtained from asbestos veins at the mine (Meeker et al. 2003). Using mineralogical naming rules recommended by Leake et al. (1997), the results indicate that the asbestos at Libby includes a number of related amphibole types. The most common forms are winchite and richterite, with lower levels of tremolite, actinolite, and magnesioriebeckite. Because the mineralogical name changes that have occurred over the years do not alter the asbestos material that is present in Libby, and because Environmental Protection Agency (EPA) does not find that there are toxicological data to distinguish differences in toxicity among these different forms, EPA does not believe that it is important to attempt to distinguish among these various amphibole types. Therefore, EPA simply refers to the mixture as Libby amphibole (LA) asbestos.

Conceptual site models (CSMs) are used to identify potential site-specific exposure pathways to determine what pathways require evaluation during risk assessment and to ensure each pathway is properly assessed at the time of RI sample collection. The CSM for current and future receptors at OU1 indicate the potential contaminated media of concern for OU1 include: indoor air, dust in air of vehicles, outdoor air near disturbed soil, general (ambient) outdoor air, and dust in air from disturbances of roofing or other outdoor surfaces. Current potential human receptors at the site include rescue volunteers, fishing guides, park visitors, city maintenance workers, future commercial workers, and future construction workers. Additional discussion regarding the potential exposure pathways are discussed in Section 6.

During the investigations performed to determine LA exposure levels for the pathways of concern at OU1, LA was observed in all media sampled: indoor air and dust, outdoor ambient air, personal air, and soil. Risk evaluations indicate the only exposure pathway of concern is related to the potential future exposures to outdoor



air near disturbed soil. Exposures to LA from disturbance of outdoor soil could become higher in the future if no remedial actions are taken. Current site conditions are such that vermiculite is present in surface soil. Vermiculite and LA will continue to exist in surface soil at the site if no remedial actions are taken. The details regarding how these conclusions were reached are provided in this RI report.

#### 1.1 Report Organization

This RI report is organized according to the format suggested in the *Guidance for Conducting Remedial Investigations and Feasibility Studies under the Comprehensive Environmental Response Compensation and Liability Act* (EPA 1988), and includes the following sections:

- **Section 1 Introduction**. Provides the purpose and organization of the RI, a brief description of the site location and layout, and a summary of mining and regulatory activities conducted to date at the site.
- Section 2 Study Area Investigations and Removal Actions. Provides an overview of site investigations and removal actions completed at the site.
- Section 3 Physical Characteristics. Provides a description of the physical characteristics of the site. Includes discussion of climate, surface water, geology, groundwater, land use, and demographics.
- **Section 4 Nature and Extent of Contamination**. Describes the nature and extent of LA contamination within the site.
- Section 5 Fate and Transport. Describes how LA moves through the various media at the site. Includes contaminant release mechanisms, potential routes of migration, sources, and contaminant fate and persistence.
- **Section 6 Risk Assessment**. Presents the human health risk assessment for the site.
- **Section 7 Summary and Conclusions**. Summarizes the material in the previous sections and provides conclusions drawn from that work.
- Section 8 References. Lists all the references used in the preparation of this RI report.

#### 1.2 Site Background

Numerous hard rock mines have operated in the Libby area since the 1880s, but the dominant impact to human health and the environment in Libby has been from vermiculite mining and processing. Prospectors first located vermiculite deposits in the early 1900s on Rainy Creek northeast of Libby. Edward Alley, a local rancher, was also a prospector and explored the old gold mining tunnels and digs in the area. Reportedly, while exploring tunnels in the area, he stuck his miner's candle into the wall to chip away some ore samples. When he retrieved his candle, he noticed that the



vermiculite around the candle had expanded, or "popped," and turned golden in color.

In 1919, Alley bought the Rainy Creek claims and started the vermiculite mining operation called the "Zonolite Company." While others thought the material was useless, he experimented with it and discovered it had good insulating qualities. Over time, vermiculite became a product used in insulation, feed additives, fertilizer/soil amendments, construction materials, absorbents, and packing materials. Many people used vermiculite products for insulation in their houses in and around the Libby Site and soil additives in their gardens. In 1963, the W. R. Grace Company (Grace) bought the mine and associated processing facilities and operated them until 1990.

Operations at the mine included blast and drag-line mining and milling of the ore. Dry milling was done through 1985, and wet milling was done from 1985 until closure in 1990. After milling, concentrated ore was transported down Rainy Creek Road by truck to a screening facility (known today as the former Screening Plant) adjacent to Montana Highway 37 (Highway 37), at the confluence of Rainy Creek and the Kootenai River. Here the ore was size-sorted and transported by rail or truck to processing facilities in Libby and nationwide. At the processing plants, the ore was expanded or "exfoliated" by rapid heating, then exported to market via truck or rail. Historic maps show the location of the "Zonolite Company" processing operation at the edge of the lumber mill, near present day Libby City Hall. This older processing plant was taken off line and demolished sometime in the early 1950s. The other processing plant (known today as the former Export Plant – OU1 and the subject of this RI report), was located near downtown Libby near the Kootenai River and Highway 37. Expansion operations at the site ceased sometime prior to 1981, although existing site buildings were still used to bag and export milled ore until 1990.

After operations at the Export Plant ceased, various commercial and industrial business operated from the former plant location until Grace and EPA began removal activities in 2000.

Over the course of Grace's operation in Libby, invoices indicate shipment of nearly 10 billion pounds of vermiculite from Libby to processing centers and other locations. Most of this was shipped and used within the United States. Nearly all of this material ended up in a variety of commercial products that were marketed and sold to millions of consumers.

#### **1.2.1** OU1 Site Description

To facilitate a multi-phase approach to remediation of the Libby Site, seven separate OUs have been established. These OUs are shown on Figure 1-1 and include:

■ OU1. The former Export Plant is defined geographically by the property boundary of the parcel of land that included the former Export Plant and is situated on the south side of the Kootenai River, just north of the downtown area of the City of Libby, Montana (Figure 1-2). The property is bounded by the Kootenai River on the north, Montana Highway 37 (forthwith referred to as Highway 37) on the east, the



BNSF railroad thoroughfare on the south, and State of Montana property on the west.

- OU2. OU2 includes areas impacted by contamination released from the former Screening Plant. These areas include the former Screening Plant, the Flyway property, the Highway 37 right-of-way adjacent to the former Screening Plant and/or Rainy Creek Road, and privately owned properties.
- OU3. The mine OU includes the former vermiculite mine and the geographic area (including ponds) surrounding the former vermiculite mine that has been impacted by releases from the mine, including Rainy Creek and the Kootenai River. Rainy Creek Road is also included in OU3. The geographic area of OU3 is based primarily upon the extent of contamination associated with releases from the former vermiculite mine.
- OU4. OU4 is defined as residential, commercial, industrial (not associated with former W.R. Grace Company [Grace] operations), and public properties, including schools and parks in and around the City of Libby, or those that have received material from the mine not associated with Grace operations.
- OU5. OU5 is defined geographically by the parcel of land that included the former Stimson Lumber Company. OU5 is bounded by the high bank of Libby Creek to the east, the Kootenai River to the north, and residential/commercial/industrial property within OU4 to the south and west. This OU is approximately 400 acres in size and is currently occupied by various vacant buildings as well as multiple operating businesses (lumber processing, log storage, excavation contractor, etc.). Within the boundary of OU5 exists the Libby Groundwater Superfund Site, which is not associated with the Libby Asbestos Superfund Site.
- OU6. Owned and operated by the Burlington Northern and Santa Fe Railroad (BNSF), OU6 is defined geographically by the BNSF property boundaries from the eastern boundary of OU4 to the western boundary of OU7 and extent of contamination associated with the rail yard.
- OU7. The Troy OU includes all residential, commercial, and public properties in and around the town of Troy, Montana, approximately 20 miles west of downtown Libby.

OU1 encompasses an area of approximately 17 acres and is situated on the south side of the Kootenai River, just north of the downtown area of the City of Libby, Montana (Figure 1-2). The property is bounded by the Kootenai River on the north, Highway 37 on the east, the BNSF railroad thoroughfare on the south, and State of Montana property on the west.

The site was historically owned and used by Grace for stockpiling, staging, and distributing vermiculite and vermiculite concentrate to vermiculite processing areas and insulation distributors outside of Libby. Because vermiculite mined from Libby has been found to be contaminated with LA, a known human health risk, EPA



initiated an emergency response action in November 1999 to address questions and concerns raised by citizens of Libby regarding possible ongoing exposures to asbestos fibers as a result of historical mining, processing, and exportation of asbestoscontaining vermiculite. This report summarizes each of the investigation events and subsequent cleanups that have occurred at OU1 between 1999 and 2007. Information regarding quick response activities conducted by EPA in 2008 is also provided.

Based on current land use, the site on the west side of Highway 37 is divided into two distinct areas separated by City Service Road (also known as West Thomas Street): the area of the site to the south of City Service Road (approximately 12 acres) and a 4.7-acre recreational area known as Riverside Park to the north of City Service Road. For discussion purposes, these areas will be referred to throughout this report as Area 1 and Area 2, respectively. The Riverside Park boat ramps are part of Area 2. In addition, the embankments of Highway 37 on both sides of the highway, City Service Road, and Thomas Street are included as part of OU1 because of their immediate proximity to the site and the known presence of vermiculite in this area. These areas will be referred to throughout this report as Area 3. Figure 1-3 shows the delineation of these areas.

#### 1.2.2 Historic Use

From the early 1960s to approximately 1990, the Export Plant was used by Grace for stockpiling and distributing vermiculite concentrate to Grace expansion plants and customers throughout the United States. Ownership was transferred to the City of Libby in the mid-1990s.

Throughout its history, portions of both Area 1 and 2 of the site have been leased to various parties for commercial and non-commercial enterprises. From approximately 1977 to 1997, organized youth baseball events (games and practices) were held at ball fields, which were centrally located in Area 1. Between approximately 1987 and 2000, the Millwork West Company, a retail lumberyard and building material supplier, leased the northwestern portion of Area 1. Buildings and equipment used by Millwork West were removed and/or demolished as part of the removal activities conducted by Grace in 2001 and 2002, as described in Section 2 of this report.

Other commercial and industrial uses of the site also occurred in the past that utilized infrastructure at the site. These other commercial/industrial uses reportedly included a metal scrap dealer and a larch tree gum manufacturer. The infrastructure that supported these businesses included industrial power supply, a railroad spur, and truck scales. This infrastructure was removed during the removal activities conducted at this site.

#### 1.2.3 Current Use

Area 1 is currently owned by the City of Libby and is undeveloped, with the exception of a small area of the site currently used by David Thompson Search and Rescue. In 2004, the search and rescue organization constructed a building (see Figure 1-3) containing a main office and a five-bay garage on the northwest portion of the site on the south side of City Service Road. The garage is used for storing search

**CDM** 1-5

and rescue equipment and vehicles. Several other agencies, including local and state law enforcement, also hold meetings in the main office. Access to Area 1 has been restricted by construction fencing and EPA has provided guidance to the city regarding the use of caution when conducting any activities at the site that disturb soil.

Area 2, Riverside Park, is also currently owned by the city and serves a variety of recreational visitors. The main features of the park include two boat ramps, a pavilion, picnic tables, and a pumphouse. The newer of the two boat ramps is used by recreational boaters and commercial fishing outfitters; the older ramp is not commonly used due to swift current at its approach. The pumphouse (see Figure 1-3) houses a pump that draws non-potable water from the Kootenai River. The pump was installed jointly by the City of Libby and Lincoln County in 1999 to provide a backup water source to local fire departments. The pumphouse is accessed by city personnel in order to perform maintenance on the pump. The pump is connected to an external water spigot, which is used by the city to draw water for street sweeping and other maintenance operations, and other workers (such as employees of local fill pits and contractors working on EPA's removal program) to draw water primarily for use in dust suppression equipment. Access to Area 2 is unrestricted.

Area 3 is owned and maintained by the Montana Department of Transportation (MDT). MDT currently performs only periodic maintenance of these embankments as needed. The types of maintenance activities conducted by MDT include application of herbicides, replacement of guardrails and guardrail posts, and replacement and maintenance of roadside light posts. Access to these areas is unrestricted.

#### 1.2.4 Future Use

Future use of Area 1 is unknown at this time. The city expects that David Thompson Search and Rescue will continue to utilize the northwest portion of the site. Area 2 (Riverside Park) will continue to serve recreational visitors; a change in land use is not currently anticipated. It is also anticipated that Area 3 will not change use and will remain undeveloped and owned and maintained by MDT.



## Section 2 Site Study Area Investigation and Removal Actions

Multiple investigation, pre-removal, and removal events have occurred at the site to date. This section discusses each of the events and presents analytical data and observations relevant to risk assessment and the FS. Discussions in this section are presented as the action or activity occurred chronologically and by area as shown on Figure 1-3. Each of the following events is summarized in this section:

Date of Investigation/Action	Investigation/Action Activity	Activity Lead	
Area 1 – Former Export Pla	nt		
1999, December	Soil sampling	EPA	
2000, March/April	Soil and stationary air sampling	EPA	
2000, June	Activity-based sampling (ABS)	EPA	
2000, October/November	Removal of vermiculite and contaminated dust, soil, and debris	Grace	
2001, March/April/August	Soil, bulk materials, and dust sampling	EPA	
2001, September/October	Building demolition and removal of contaminated soil and debris	Grace	
2002, April/May	Bulk materials and soil sampling	EPA	
2002, October – December	Building demolition and removal of contaminated soil	Grace	
2006, June	Soil sampling		
2006, June – September	06, June – September Water line installation (City of Libby)		
2007, September – RI data gap sampling, site-wide soil sampling and indoor ABS		EPA	
Area 2 - Riverside Park			
2003, May/July	Soil sampling	EPA	
2003, September /October	Contaminant screening study (CSS), and pre- removal soil sampling	EPA	
2003, October/November	Removal of contaminated soil	EPA	
2007, July	Placement of rock cover in areas of observed vermiculite	City of Libby	
2007, September	RI data gap sampling, site-wide soil sampling	EPA	
2008, May	Site preparation for placement of pavilion footers	EPA	
2008, July	Removal of contaminated soil	EPA	
Area 3 – Embankments			
2007, September	RI data gap sampling, surface and subsurface soil sampling	EPA	



### 2.1 Area 1 Investigation and Removal Activities

#### 2.1.1 Area 1 Investigation Sampling - December 1999

In December 1999, a total of 80 soil samples (72 samples and 8 field duplicates) were collected from Area 1 of OU1. Sample locations were selected in accordance with the Sampling and Quality Assurance Project Plan (SQAPP) for Environmental Monitoring for Asbestos (Phase 1 SQAPP) (EPA 1999) and are depicted on Figure 2-1. All samples were collected as grab samples from the 0- to 2-inch, 0- to 24-inch, or 2- to 12-inch depth interval as shown in Table 2-1. Samples were collected, handled, and analyzed in accordance with the Phase 1 SQAPP (EPA 1999). Results by the National Institute for Occupational Safety and Health (NIOSH) polarized light microscopy (PLM) NIOSH Method 9002 (PLM-9002) (NIOSH 1994) varied between non-detect (ND) and 5 percent (%) LA. Sample locations and results are presented on Figure 2-1; results are shown in Table 2-1.

## 2.1.2 Area 1 Investigation Sampling - March/April 2000 2.1.2.1 Soil Sampling

In 2000, EPA requested additional soil samples be collected from Area 1 to supplement the December 1999 sampling and better characterize site soil. Between March 10 and 11, 2000, 17 grab soil samples and one duplicate were collected from the 0- to 2-inch depth interval, and 16 grab soil samples and five field duplicates from the 2- to 12-inch depth interval. One grab sample was also collected from bags of vermiculite stored outside the warehouse. All sample locations are shown on Figure 2-1. Samples were collected, handled, and analyzed in accordance with Revision 1 of the Phase 1 SQAPP (EPA 2000a). Results by PLM-9002 indicated levels of LA were present at concentrations ranging from ND to 10%. Results for the March 2000 event are shown on Figure 2-1 and summarized in Table 2-2. Locations of vermiculite observed during the March 2000 soil sampling event are shown on Figure 2-1.

#### 2.1.2.2 Air Sampling

In addition to soil sampling, EPA requested stationary outdoor air sampling be conducted in order to establish baseline concentrations of LA in ambient air at the site. Accordingly, on separate days (April 4, 5, and 9, 2000), members of EPA's Response Engineering and Analytical Contract team collected stationary air samples (one field and one co-located sample each day) from various locations within the Area 1 boundary. Co-located air samples are samples collected side-by-side and are sometimes referred to as replicate samples. These samples are used to determine the reproducibility of a sample result.

Coordinate data are not available for these samples; therefore, sample locations are not presented graphically in this report. Samples were collected, handled, and analyzed in accordance with Revision 1 of the Phase 1 SQAPP (EPA 2000a); however, only the field samples were selected for analysis. The co-located samples remain in archive at a project-contracted laboratory. Results by the International Organization for Standardization (ISO) 10312 (ISO 1995) method indicated LA in ambient air at all



three sample locations at concentrations ranging from 0.0001 to 0.0023 structures per cubic centimeter (s/cc) (Table 2-3). The data set presented in Table 2-3 is too limited to draw any conclusions related to risk solely based on this data set. The average total LA concentration observed in 2006-2008 Libby Site ambient air sampling program was 0.00001 s/cc, indicating the ambient air at OU1 contained LA at concentrations above those currently considered to be ambient within the Libby Valley (EPA 2009).

#### 2.1.3 Area 1 Investigation Sampling - June 2000

On June 25, 2000, EPA conducted personal air sampling during an ABS event. The intent of this ABS event was to aid in determining exposures to LA that result from routine activities in areas that contain Libby vermiculite. Two samplers were monitored during the event: one while sweeping the floor of the planar shop's break room; the other while sweeping and moving bags of vermiculite insulation inside the bag house portion of the planar shop (see build-out on the west side of the planar shop depicted on Figure 2-2). Results for the two personal air samples that were analyzed by ISO 10312 indicated LA in concentrations of 0.6470 s/cc and 2.3666 s/cc for the break room sweeper and the bag house worker, respectively. Table 2-4 presents these results of this sampling effort.

#### 2.1.4 Area 1 Removal Event - July 2000 through January 2001

EPA issued a Unilateral Administrative Order (UAO) to Grace on May 23, 2000, based on the finding of LA at levels of concern in air and site soil in samples collected as part of sampling events described in Section 2.1. The primary activities required by the UAO and outlined in the EPA-approved Export Plant Removal Action Work Plan (URS 2000) were to temporarily relocate the onsite business (Millwork West), clean five onsite historic buildings (Figure 2-2) and the building's contents, excavate and dispose of vermiculite and LA-contaminated soil and debris, and restore the property. Work by Grace's contractors, was conducted between July 19, 2000 and January 5, 2001. During this period, the government provided oversight of activities to ensure compliance with the EPA-approved work plan, including health and safety protocols. Contaminated materials were disposed of at the former Libby vermiculite mine.

During soil excavation, confirmation soil sampling (i.e., samples collected from the floor of the excavation) was conducted by Grace's contractor. The 63 confirmation soil samples were analyzed by Grace's laboratory using PLM with dispersion staining method EPA/600/R-93/116 (EPA 1993a). At EPA's request, in order to expedite cleanup work and provide a quality control (QC) measure on samples analyzed by Grace, a portion of the confirmation soil samples were split and analyzed at EPA's onsite laboratory by PLM-9002. A total of 18 split samples and one duplicate split sample were handled and analyzed in accordance with the Removal Action Sampling and Analysis Plan (SAP) for Confirmation Sampling of Soil and Perimeter and Personal Sampling of Air for Asbestos, Revision 1 (EPA 2000b). Grace confirmation soil sample results, as reported in the Final Report Removal Activities at the Export Plant, Libby, Montana (URS 2001), as well as results of the split soil samples are presented in Table 2-5. Results ranged from ND to 2% LA; however, Grace was directed to remove soil in additional 4-6 inch increments until EPA clearance criteria (less than [<] 1% LA at depth) for confirmation soil sampling was met in each section

of the excavation. Sample locations and results for all confirmation soil samples collected as part of this removal event are shown on Figure 2-3.

The backfill materials used at Area 1 during 2000 were obtained from the Plum Creek pit located in Libby, an EPA-approved source for fill materials. Asbestos analytical results for the Plum Creek pit are provided in Appendix A; results of the additional analyses are available upon request. Restoration at Area 1 consisted of backfilling the entire excavated area with a sufficient layer of common fill to bring the grade to within 6 inches of the original surveyed grade. The final 6-inch layer was filled with either gravel or topsoil, as appropriate, depending upon the original surface conditions.

Personal air monitoring data are not available in the EPA project database for this removal action.

#### 2.1.5 Area 1 Investigation Sampling - March/April/August 2001

Following reports of observations of vermiculite and mining waste at the site following the UAO cleanup, EPA requested additional sampling to determine if residual levels of LA remained at the site. This section discusses investigation soil, bulk materials, and dust sampling activities that occurred in 2001. All samples presented in this section were collected, handled, and analyzed in accordance with Revision 1 of the Phase 1 SQAPP (EPA 2000a).

#### 2.1.5.1 Soil Sampling

A total of 15 soil samples were collected during 2001 at Area 1, as follows:

- Three grab samples were collected from the 0- to 1-inch depth interval at various locations near site buildings on March 2, 2001
- Five grab samples and one duplicate were collected from the 0- to 6-inch depth interval at various locations near site buildings on April 19, 2001
- One grab sample of in-place 1 ½ -inch minus grade fill material (from the Granite pit) from the 0- to 6-inch depth interval was collected on April 24, 2001. It is assumed that the sample was collected from fill material placed during the October/November 2000 removal event at Area 1.
- One 3-point composite sample was collected from the 0- to 4-inch depth interval at the site on/off ramp, and one 3-point composite sample (0- to 4-inch depth interval) near the BNSF railroad tracks on August 8, 2001
- Four grab samples were collected from the 0- to 4-inch depth interval on August 10, 2001

Locations and results for these soil samples are presented on Figure 2-1 (with the exception of the in-place fill material sample, for which no coordinate data is available) and results are summarized in Table 2-6. Results ranged from ND to 35% LA by PLM-9002; the in-place fill material sample was ND for LA. Locations of



vermiculite observed during the August 2001 soil sampling events are shown on Figure 2-1.

#### 2.1.5.2 Bulk Materials Sampling

On April 19, 2001, 39 bulk material samples (e.g., wood shavings, insulation, debris, etc.) were collected from within the five buildings located at the site. Building locations are shown on Figure 2-2. Seven samples were collected within the pole barn; seven within the planar shop; six within the scale house/lumber storage building; 13 within the warehouse; and six within the shed. Results of the bulk material samples are presented in Table 2-7 and ranged from ND to 5% LA by PLM-9002.

#### 2.1.5.3 Dust Sampling

Two single-point dust samples were collected on April 19, 2001: one from a horizontal surface inside the warehouse and the other from the exterior surface of the warehouse foundation. The location of the warehouse is shown on Figure 2-2. Results by ISO 10312 indicated loading of LA in dust on the building's foundation at 169,836 structures per square centimeter (s/cm²), while the indoor sample was ND for LA. These results are presented in Table 2-8.

On August 28, 2001, four separate 3-point composite dust samples were collected from horizontal surfaces inside the pole barn, the surface of equipment stored inside the shed, and from the surface of equipment and supplies stored inside each of two site storage containers (i.e., connex boxes) (Figure 2-2). Samples were analyzed by ISO 10312. Results for the four sampled areas indicated LA loading in dust at 129,127 s/cm²; 97,455 s/cm²; 19,491 s/cm²; and 40,200 s/cm², respectively, as shown in Table 2-8.

#### 2.1.6 Area 1 Removal Event - September/October 2001

As a result of soil, bulk materials, and dust investigation sampling conducted by EPA in spring and summer 2001 (Section 2.4), EPA required Grace to conduct a cleanup action to address residual LA contamination in site buildings and soil. The work was conducted between September 5 and October 17, 2001 in accordance with addenda to the Export Plant Removal Action Work Plan (URS 2000). Ultimately, four of the five buildings (all but the planar shop – see Figure 2-2) were demolished and additional soil was excavated from the site. The contaminated soil and debris was disposed of at the former Libby vermiculite mine. EPA contractors provided general oversight, health and safety monitoring, and confirmation dust and soil sampling during the removal. All samples were collected, handled, and analyzed in accordance with the Removal Action SAP (EPA 2000b). The following sections describe sample collection associated with the September/October 2001 Grace removal activities.

#### 2.1.6.1 Dust Sampling

One 3-point composite dust sample was collected on September 6, 2001 from the surface of lumber that had been decontaminated and moved outside of the exclusion zone. This sample was analyzed by ISO 10312 and found to be ND for LA (Table 2-9).

On September 15, 2001, for informational purposes, one 3-point composite dust sample was collected from the surface of a lumber pile located inside the exclusion zone. Sample results by ISO 10312 indicated LA loading at 365 s/cm<sup>2</sup> (Table 2-9).

On October 12, 2001, six 3-point composite dust samples were collected in and around the planar shop. The location of this building is shown on Figure 2-2. Samples were collected at the following locations:

- Surfaces immediately outside the entrance to the building
- Surfaces of the sawdust exhaust chute outside the building
- Surface of the covered concrete pad outside the building
- Various horizontal surfaces inside the building
- Horizontal surfaces inside the building's lunch room
- Surfaces immediately inside the entrance to the building

All six samples were sent for analysis by ISO 10312; results indicated LA loading in dust in and around the planar shop at levels between 609 s/cm<sup>2</sup> and 444,636 s/cm<sup>2</sup>. Table 2-9 presents these results.

#### 2.1.6.2 Soil Sampling

On October 4 and 5, 2001, 23 subsurface confirmation soil samples were collected by EPA in association with oversight of the Grace removal activities. Subsurface samples were collected following a gridded approach from depths varying between 16 and 50 inches below ground surface (bgs) in the following areas: the former pole barn, former warehouse, former scale house/lumber storage building, former shed, east ball field (easternmost field of two ball fields that used to be centrally-located in Area 1), and BNSF spur extending just south of the planar shop. Refer to Figure 2-2 for these locations. Samples were composite samples with varying numbers of subsamples (between two and five); results were all <1% LA by PLM-9002 and are presented in Table 2-10.

In addition to subsurface confirmation soil sampling, 39 surface soil samples were collected on October 9 and 10, 2001 from areas that were previously remediated but suspected to have been impacted (i.e., cross contaminated) by current-year removal activities. These surface samples were 5-point composites from the 0- to 2-inch depth interval from the grid locations identified in Table 2-10. Results were either ND or <1% LA by PLM-9002 (Table 2-10). Eight additional soil samples were collected on October 16, 2001 from areas that were not anticipated to have been impacted by removal activities, in order to determine cleanup needs. Of the eight soil samples, six were surface samples from 0 to 2 inches bgs and two were subsurface samples from 8 to 10 inches bgs. Results of the surface samples were all ND for LA, while the subsurface samples were <1% LA (Table 2-10). As a result of these findings, EPA required Grace to cover all impacted areas with a 4-inch layer of crushed gravel. Locations and results for samples collected during October 2001 are shown on Figure



2-3. Final confirmation soil sample results (i.e., results of the final sample collected in each grid or excavation area) are shown on Figure 4-1 (top portion). Figure 4-1 (top portion) also depicts the cumulative backfill depths based on all soil removal activities conducted.

Similar to the 2000 removal work, restoration was conducted in accordance with the site work plan (URS 2000) and applicable addenda. Backfill materials were obtained from the Plum Creek gravel pit located in Libby, an EPA-approved source for fill materials. Analytical results of asbestos testing for the Plum Creek pit are provided in Appendix A.

#### 2.1.6.3 Personal Air Monitoring Data

Personal air monitoring data collected during this removal effort are presented in Table 2-11. These sample results are provided for informational purposes only and are not used in the risk assessment for this site. As indicated in Table 2-11, 36 personal air samples collected during this removal action were analyzed by one or more of the following analytical methods:

- Phase contrast microscopy (PCM) by NIOSH 7400
- TEM by Asbestos Hazard Emergency Response Act of 1986 (AHERA) counting rules
- TEM by ISO Method 10312

There are several key differences between the PCM and TEM analytical methods. Analysis via PCM reports results in units of fibers per cubic centimeter (f/cc) while TEM reports results in units of s/cc. For PCM results reported as f/cc, only fibers that are longer than 5 microns ( $\mu$ m), have an aspect ratio greater than or equal to 3:1, and a thickness of greater than 0.25  $\mu$ m are counted by this method. In addition, the PCM technique does not distinguish between asbestos and other fibers and counts all fibers meeting the criteria listed regardless of fiber composition. For TEM results reported as s/cc, only asbestos structures are counted; fibers of other composition are not counted toward the results. Typically when the TEM ISO method is used, asbestos structures are counted toward the result when their length is greater than 0.5  $\mu$ m and aspect ratio greater is than or equal to 5:1.

Thirty samples were analyzed via TEM ISO 10312 (as modified by project-specific modifications) with total LA concentrations ranging from ND to 0.0919 s/cc. A total of 33 samples were analyzed via AHERA TEM with total LA concentrations ranging from ND to 0.09290 s/cc. A total of 32 samples were analyzed via the NIOSH 7400 PCM method with results ranging from ND to 0.231 f/cc. Results of all personal and stationary air monitoring results collected during removal activities at OU1 are provided in Appendix B.

#### 2.1.7 Area 1 Investigation Sampling - April/May 2002

In response to concerns of site tenants regarding potential residual contamination, EPA conducted additional investigation sampling at the site during the spring of 2002. This section describes these bulk materials and soil sampling activities.

#### 2.1.7.1 Bulk Materials Sampling

On April 9, 2002, two bulk materials samples were collected from the interior of equipment owned and operated by Millwork West. The samples were collected, handled, and analyzed in accordance with the Phase 1 SQAPP (EPA 2000a). Both samples were ND for LA by PLM-9002. Results are summarized in Table 2-12.

#### 2.1.7.2 Soil Sampling

On May 8, 2002, two 3-point composite soil samples were collected from areas at the site where suspect mine-related material had been identified. At the time of sampling, visible vermiculite was noted near two metal connex boxes located on site. The visible vermiculite was believed to be the result of a test pit-like excavation adjacent to the BNSF railroad, which may have been tracked onto the clean fill placed by Grace during previous years' removal work. Samples were collected, handled, and analyzed in accordance with the Phase 1 SQAPP (EPA 2000a). Both samples contained <1% LA by PLM-9002, as shown on Figure 2-1 and summarized in Table 2-13. Locations of vermiculite observed during this soil sampling event are shown on Figure 2-1.

#### 2.1.8 Area 1 Removal Event – October through December 2002

As a result of the concerns of site tenants regarding potential residual contamination resulting from the 2001 removal actions (Section 2.1.6), starting October 14, 2002, Grace began removing all remaining building material and debris from Area 1 at the direction of EPA. The work was conducted in accordance with addenda to the Export Plant Removal Action Work Plan (URS 2000). Addenda are available from the EPA Administrative Record. Contaminated soil from the footprint of the demolished planar shop and from an area near the BNSF railroad tracks was also removed. All contaminated soil and building material was disposed of at the former Libby vermiculite mine. During this work, EPA provided oversight and confirmation soil sampling support, as well as personal and perimeter health and safety air monitoring. Removal activities concluded on December 11, 2002.

As part of this removal event, removal oversight personnel collected a total of 44, 5-point composite subsurface confirmation soil samples on December 3, 2002 (Figure 2-3). A total of 36 soil samples were analyzed, while 8 samples were archived at a project-contracted laboratory. The subsurface samples were collected from the excavation floor, and followed a gridded approach in the main excavation zone. Sample depths averaged 18 inches bgs; however, three areas required excavation to depths of 38, 74, and 122 inches bgs due to encountering visible vermiculite and/or building foundations.

Confirmation soil samples were collected, handled, and analyzed in accordance with the Removal Action SAP (EPA 2000b). As shown in Table 2-14, results were either

ND or <1% LA by PLM-9002. Final confirmation soil sample results (i.e., results of the final sample collected in each grid or excavation area) are depicted on Figure 4-1 (top portion). Restoration was conducted in accordance with the site work plan (URS 2000) and applicable addenda using locally available EPA-approved backfill materials from the Plum Creek pit. Analytical results of asbestos testing for the Plum Creek pit for 2002 are provided in Appendix A. Excavation limits resulting from removal work conducted by Grace between 2000 and 2002 are depicted on Figure 4-1 (top portion). Figure 4-1 (top portion) also depicts the cumulative backfill depths based on all soil removal activities conducted to date.

During this removal action, a total of 10 personal air samples were collected in accordance with the Removal Action SAP (EPA 2000b) and analyzed by PCM via NIOSH 7400. PCM results ranged from ND to 0.492 f/cc. All results are provided in Table 2-15. The results of these samples are provided for informational purposes only and are not used in the risk assessment to calculate risk for this site. The results were used in a qualitative manner to support lines of evidence regarding potential exposures at the site (Section 6.5.3.2). Results of all personal and stationary air monitoring results collected during removal activities at OU1 are provided in Appendix B.

## 2.1.9 Area 1 City Water Line Installation – June through September 2006

In the summer of 2006, the City of Libby began excavating a trench through the field portion of Area 1 parallel to City Service Road in preparation for installing a new drinking water supply pipeline (Figure 2-4). Quantities of vermiculite were encountered in localized areas near the existing hydrant at depths between 10 and 36 inches bgs. Following the discovery of vermiculite, the city halted work.

In June 2006, EPA requested samples be collected from the soil stockpiled during the initial pipeline excavation. A total of eight, 5-point composite soil samples were collected: four from the surface two inches of the stockpiled material and four from the 0- to 2-inch depth interval in the area immediately surrounding the stockpile. Samples were collected, handled, and analyzed in accordance with the Draft Final Response Action Work Plan (EPA 2003). Sample locations and results by PLM-9002 are shown on Figure 2-1. Results ranged from ND to 3% LA, and are presented in Table 2-16.

As a result of discussions between the city, EPA, and the Volpe Center, an addendum (CDM 2006) to the Draft Final Response Action Work Plan (EPA 2003) was prepared in order to safely complete the water line installation. This work was carried out between August 24 and September 21, 2006, during which EPA provided oversight and air monitoring in accordance with the response action work plan and addendum. All soil removed was transported to the mine for disposal, including the soil stockpiled during the initial excavation work completed by the city. The location of the newly-installed city water pipeline is shown on Figure 2-4.



#### 2.1.10 Other Area 1 Activity

During an August 22, 2007 site visit, approximately 50 cubic yards of angular rock (riprap) was observed in several piles along the south side of City Service Road, approximately half way between the City Service Road/Highway 37 intersection and the David Thompson Search and Rescue building. According to the city, the riprap was obtained from the United States Army Corps of Engineers' pit (located on Fisher River Road approximately 17 miles east of Libby) for the purpose of covering two areas of exposed orange fencing: one along the Kootenai River bank in between the new and old boat ramps and the other on the surface of the old boat ramp (see Section 2.2.3 for description of the use of orange fencing in this area).

## 2.1.11 Area 1 Investigation Sampling – September to November 2007

By comparing the potential exposure pathways and contaminated media of concern to the existing data set for OU1, presented in the Data Summary Report (CDM 2007a), a data gap analysis (CDM 2007b) was performed to determine additional sample collection efforts that would be required to gather the remaining information needed for the completion of a risk assessment specific to OU1. Based on the data gap analysis the *Final OU1 Data Gap Sample Collection SAP* (CDM 2007c) was developed. All sample collection efforts described in the following sections followed the details described in this SAP. The following sections summarize the data collected as part of this effort specific to Area 1.

#### 2.1.11.1 Surface Soil Sampling

Between September 12 and 21, 2007, a total of 42 surface (0-6 inches bgs) soil samples (including 3 field duplicates) were collected from Area 1. Samples were collected as 30-point composite samples using a grid pattern.

The samples were processed (i.e., dried, seived, ground) at CDM's close support facility (CSF) in accordance with the Close Support Facility Soil Preparation Plan, Revision 1 (CDM 2004) and sent for analysis by the PLM visual estimation (PLM-VE) and gravimetric (PLM-Grav) methods (Syracuse Research Corporation [SRC] 2003). Following processing, the VE method is typically applied to the fine fraction of a soil sample while the gravimetric method is typically applied to the coarse fraction. As such, a coarse fraction (and corresponding PLM-Grav result) will not exist if all of the dried sample material passes through a ¼-inch mesh screen. The material passing through the ¼-inch mesh screen constitutes the fine fraction. EPA is in the process of evaluating the accuracy and replicability of each of these methods. However, based on EPA's performance evaluation study to date, PLM-VE results are currently being used to make project removal decisions. Therefore, for the purposes of this report, only PLM-VE results are presented.

Sample results for the 2007 soil investigation activities are shown in Figure 2-5, and summarized in Table 2-17. The following table summarizes the number of samples with detectable levels of LA.

Summary of PLM Results in Area 1					
Location Number of Number of Samples With PLM-VE Detections					
	Collected	ND	TR	<1%	≥1%
Area 1	42	29	13	0	0

Notes: PLM – polarized light microscopy; LA – Libby amphibole; VE – visual estimation; ND – non-detect; TR – trace; < - less than; % - percent;  $\geq$  – greater than or equal to

As part of the soil sample collection, observations of the amount of visible vermiculite were made according to the Libby Site-specific guidance for the *Semi-Quantitative Visual Estimation of Vermiculite in Soils and Residential and Commercial Properties* (CDM-LIBBY-06, Revision 1 [CDM 2007d]). In Area 1, a total of 1,170 point inspections for visible vermiculite (or visual point inspections) were recorded. The following table summarizes the relative amounts of vermiculite observed, and Figure 2-5 illustrates the individual point inspections where vermiculite was observed.

Summary of Visible Vermiculite Observations in Area 1					
Location	Total Number of	Relative Amount of Vermiculite Observed			
	Visual Point Inspections	None	Low	Medium	High
Area 1	1,170	1,032	118	16	4

As the summary table above indicates, vermiculite was not observed in the majority (88.2%) of the point inspections in Area. Low levels of vermiculite were observed at 10.1% of the point inspections; medium levels were observed at 1.4% of the point inspections; and high levels were observed at 0.3% of point inspections in Area1.

#### 2.1.11.2 Indoor ABS Sampling

To estimate human exposure levels to LA from indoor air, an ABS sampling event specific to OU1 was conducted in the search and rescue building between October 30 and November 8, 2007. ABS consisted of both passive and active behaviors completed separately in the garage and meeting room areas. All samples were analyzed by TEM using ISO 10312 counting rules as modified by project-specific laboratory modifications. A total of 22 air samples were collected during the indoor ABS activities, as shown in the following table:

Summary of OU1Search and Rescue Building Indoor ABS Air Sampling						
Location	ABS Activity Type	Dates Conducted	Number of Samples Collected			
Garage	Active	10/30/2007	4*			
		10/31/2007	5*			
		11/1/2007	7*			
Meeting Room	Passive	11/6/2007	1			
		11/7/2007	1			
		11/8/2007	1			
	Active	11/6/2007	1			
		11/7/2007	1			
		11/8/2007	1			
	Total 22					

Notes: OU1 – Operable Unit 1; ABS – activity-based sampling; \* During the active scenario in the garage area, when visible loading was observed on the sample cassette, sample collection was continued on a new cassette and all cassettes sent for analysis

Table 2-18 summarizes the results of the air samples collected during the ABS activities. Results of the active-garage scenario ranged from ND to  $0.0699 \, \text{s/cc}$ ; active-meeting room results ranged from  $0.0011 \, \text{s/cc}$  to  $0.0088 \, \text{s/cc}$ ; and passive-meeting room results ranged from  $0.0003 \, \text{s/cc}$  to  $0.0079 \, \text{s/cc}$ .

Microvacuum dust samples were also collected from the garage, meeting room, and emergency response vehicles. While the SAP did not prescribe the collection of microvacuum samples from the vehicles, the search and rescue group did not want EPA contractors using the vehicles as part of the ABS activities. Thus, in order to gather data regarding the dust levels in the vehicles, microvacuum samples were collected instead of ABS. A total of nine dust samples were collected from the building, three each from the meeting room, garage, and rescue vehicles. All samples were analyzed by TEM using ISO 10312 counting rules as modified by project-specific laboratory modifications. Table 2-19 summarizes the results of the microvacuum air samples. LA was detected in one sample collected from the meeting room and one sample collected from the garage. The total LA loading for the meeting room and garage dust samples were reported at 75 and 20 s/cm², respectively.

#### 2.1.11.3 Personal Air Sampling

To prepare Area 1 for soil sampling, vegetation overgrowth was removed using a bush hog. While vegetation removal was being performed, personal air samples were collected from the workers operating the bush hog. To mitigate any fugitive dust emissions from the site during the bush hogging, the ground in the areas with vegetation overgrowth was wetted prior to bush hogging. A total of eight personal air samples were collected during this activity. Most of the ground in the area where bush hogging occurred contained visible vermiculite at low to moderate levels as defined by CDM-LIBBY-06, Revision 1 (CDM 2007d). The personal air samples were submitted for analysis by both PCM (NIOSH 7400) and TEM (ISO 10312) as modified by project-specific laboratory modifications. Table 2-20 summarizes the personal air

sample results. Of the eight samples collected, LA was detected in six samples by ISO 10312 concentrations ranged from 0.0038 s/cc to 0.0715 s/cc.

## 2.2 Area 2 Investigation and Removal Activities 2.2.1 Area 2 Investigation Sampling - May/July 2003

The City of Libby initiated renovations at Riverside Park in May 2003. A 2-inch thick layer of vermiculite along the west side of the boat ramp was discovered during construction of a new boat ramp. The layer was approximately 8 to 10 inches below the ground surface and was exposed along the ramp. Additional vermiculite containing soil was exposed during renovation of the picnic area when overburden material was scraped off the top of the bank west of the new boat ramp. Subsequent personal communications with former city worker's indicated that the vermiculite found is this area was scraped from Area 2 and used to fill in low spots in Area 1.

In response to the discovery of contaminated material at the site, a visual inspection and soil sampling was conducted on May 22, 2003. Visible vermiculite was observed in the park and along the banks of the Kootenai River. In conjunction with the inspection, three soil samples were collected from the Riverside Park boat ramp. The samples were 5-point composites from the 0- to 1-inch depth interval and were collected, handled, and analyzed in accordance with the Phase 1 SQAPP (EPA 2000a). Results for the samples were ND by PLM-9002 (Figure 2-1 and Table 2-21). Following the inspection and receipt of sample results, EPA covered and fenced-off those areas with the greatest amounts of visible contamination in order to mitigate any short-term exposure risk. Erosion control fabric and silt fences were installed along the riverbank as interim protective measures until the site was remediated in the fall of 2003.

On July 19, 2003, two soil samples were subsequently collected at the boat ramp – one from the north and south edges of the concrete pad and the other from the area east of the pad. Both samples were 5-point composites from the 0- to 6-inch depth interval. These samples were collected, handled, and analyzed in accordance with the Phase 1 SQAPP (EPA 2000a). The July 2003 soil samples were initially sent for analysis by PLM-9002 then subsequently processed at the CDM CSF and analyzed by PLM-VE and PLM-Grav, as applicable. The results of the samples (PLM-VE only) are presented in Table 2-21.

#### 2.2.2 Area 2 Pre-Removal Event - September/October 2003

Pre-Removal characterization was conducted in accordance with the Final Remedial Investigation and Removal Action Work Plan for Riverside Park (CDM 2003a). These activities included a verbal interview with city park personnel, visual inspection of the site, and collection of both surface and subsurface soil samples. These activities were completed between September 9 and 15, 2003.

#### 2.2.2.1 Verbal Interview

Dan Thede, Libby's Supervisor of City Services, was interviewed on September 15, 2003 to discuss historical use of Riverside Park. In summary, Mr. Thede confirmed use of the area for storing vermiculite during the period of operations at the site.

#### 2.2.2.2 Property Inspection

During the September 2003 visual inspection, vermiculite was observed at several locations within the park but was generally concentrated in areas on the river side of the former access road that ran through the property, including the entire length of the riverbank. Notable amounts of vermiculite were also observed on the southwest side of the embankment (Area 1 side) of City Service Road. Lastly, an isolated area of vermiculite was located at the bottom of the embankment of City Service Road on the east side of Highway 37. The general location of vermiculite found during this site inspection is shown on Figure 2-1; however, the extent of the vermiculite has not been recorded to date.

#### 2.2.2.3 Soil Sampling

Soil sampling activities occurred between September 9 and 13, 2003 and included both surface and subsurface test pit samples. All samples were collected, handled, and analyzed in accordance with the work plan for the event (CDM 2003a). In summary, seven surface soil samples were collected within the park; three surface soil samples were collected along the riverbank on the north side of the park; nine surface soil samples were collected on the north and five surface samples collected on the south side of the embankment of City Service Road between Highway 37 and the entrance to the park (Figure 2-1). Embankment samples were collected at 50-foot intervals as described in the work plan. It should be noted that although the embankment samples were collected as part of the Riverside Park (Area 2) work plan, the embankment is included as part of Area 1 for the purpose of potential future investigation and cleanup efforts. All surface samples were either 4- or 5-point composites from the 0- to 6-inch depth interval.

For subsurface sampling, 12 test pits were excavated and sampled, including one test pit that was dug at a later date (October 23, 2003) during subsequent removal work. Grab samples were collected at depths ranging from 12 to 39 inches bgs. The work plan stipulated that six of the test pits would have a second test pit excavated offset either 50 feet toward the site or 30 feet toward the river, depending on whether or not visible vermiculite was encountered in the six test pits. Four of these secondary offset test pits were excavated. Detailed test pit observations can be found in the Remedial Investigation and Removal Action Work Plan for Riverside Park Final RI Results Addendum (CDM 2003b).

All soil samples collected during this event were processed at CDM's CSF in Denver in accordance with the soil preparation plan (CDM 2004) and analyzed for LA using two techniques: PLM-VE and PLM-Grav (SRC 2003). Again, for the purposes of this report, only PLM-VE results are presented. Locations and results for all Riverside Park pre-removal soil samples are presented on Figure 2-1, and results are summarized in Table 2-22.

An indicated in Table 2-22, LA was observed in nine of the 26 surface soil samples collected at concentrations ranging from trace to <1%. Of the 18 subsurface soil samples collected, LA was observed at trace levels in three samples.

#### 2.2.3 Area 2 Removal Event - October/November 2003

Based on visual inspections and the results of pre-removal surface and subsurface soil sampling at Area 2, EPA determined that site soil required removal. In general, the Riverside Park removal work plan (CDM 2003a) called for soil excavation to a depth of 12 inches bgs throughout the entire park area, with the exception of the Kootenai riverbank and the embankment on the northeast side (the river side) of City Service Road. Soil in these two locations was excavated to a depth of 6 inches bgs. Excavation of the embankment on the southeast side of City Service Road has not yet been conducted but may be coordinated with other cleanup at OU1. In accordance with the Riverside Park work plan (CDM 2003a), which took into account visible vermiculite in addition to LA analytical results, additional 6-inch lifts were removed if vermiculite was visible at the floor of the excavation. This iterative process was carried throughout the site, with a maximum excavation depth of 3 feet below original ground surface elevation, except for the riverbank and City Service Road embankment, where maximum excavation depths were 12 inches bgs.

A total of 59 confirmation soil samples were collected between October 2 and November 13, 2003. Samples were 5-point composites and were collected from the floor of the excavation at depths of 6 inches up to 36 inches bgs. Results by PLM-9002 for all samples were either ND or <1% LA, with the exception of one sample (1R-24096) in the southwest portion of Area 2 (refer to Figure 2-3). The result for sample 1R-24096 was 2% LA, prompting the removal of an additional 6-inch layer of material from this area in accordance with the removal work plan. Sample results following the additional excavation were <1% LA by PLM-9002 (sample 1R-24100). Log notes indicate that two other areas were re-sampled at the discretion of onsite removal oversight personnel although the preliminary confirmation soil sample results met the soil clearance criterion of <1% LA. Details of these samples (1R-21996 and 1R-24099) are noted in the Location Description column of Table 2-23. All sample locations and results for the Riverside Park cleanup are shown on Figure 2-3 and summarized in Table 2-23.

Following excavation and confirmation soil sampling, the area was restored in accordance with the work plan (CDM 2003a). Restoration consisted of backfilling the site to grade using materials from the Boothman Pit, a local EPA-approved fill source, and hydroseeding as required. Analytical results of asbestos testing for the Boothman pit for 2003 are provided in Appendix A; results of the additional fill tests are available upon request. It should be noted that orange snow fencing was placed at depth (i.e., on the excavation floor) to indicate the presence of vermiculite in the event that soil in these areas is disturbed in the future.

As part of planned improvements by the city and in conjunction with the 2003 Area 2 removal work, a new boat ramp was installed downstream of the existing boat ramp. Prior to removal work, the city obtained riprap from the United States Army Corps of Engineers' pit located on Fisher River Road. The riprap was placed along the toe of the bank in the area just downstream of the new boat ramp. This riprap was removed, washed, and replaced during excavation activities. During restoration, topsoil was placed within the interstitial spaces of the riprap. Also prior to removal work, the city obtained riprap to be installed into the river about three-quarters of the way from the

new boat ramp to the existing boat ramp in order to slow the velocity of the water in the area of the new boat ramp. The removal contractor (Environmental Restoration) placed this riprap in consultation with the city during restoration activities.

A total of eight personal air samples were collected and analyzed by PCM via NIOSH 7400 during this removal action. PCM results ranged from ND to 0.120 f/cc. All results are provided in Table 2-24. The results of these samples are provided for informational purposes only and are not used in the risk assessment for this site. Results of all personal and stationary air monitoring results collected during removal activities at OU1 are provided in Appendix B.

#### 2.2.4 Other Area 2 Activity – July 2007

In July 2007, EPA was asked to address subsurface vermiculite that was brought to the surface during the installation of cable by a phone company. The company was installing a cable throughout the extent of Area 2, in a generally east to west line, at a depth of approximately two feet bgs. Vermiculite was exposed at the easternmost toe of the area previously excavated during the 2003 Riverside Park cleanup; however, excavation was halted once the orange snow fencing, which was placed over areas of vermiculite containing soil in 2003, was encountered. EPA responded by covering the area with four to six-inches of rock.

#### 2.2.5 Area 2 Investigation Sampling - September 2007

A total of nine, 30-point composite surface samples were collected between September 12 and 17, 2007. The samples were collected from 3- to 6- inch interval using a gridded approach. All samples were submitted for analysis using PLM-VE and PLM-Grav, as applicable. Sample results for each sampling grid are shown in Figure 2-5 (PLM-VE results only) and summarized in Table 2-25 (PLM-VE results only). The following table summarizes the number of samples with detectable levels of LA.

Summary of PLM Results in Area 2						
Number of Samples With PLM-VE  Location Samples  Number of Samples With PLM-VE  Detections of LA						
	Collected	ND TR <1% ≥1%				
Area 2	9	9	0	0	0	

Notes: PLM – polarized light microscopy; LA – Libby amphibole; VE – visual estimation; ND – non-detect; TR – trace; < – less than; % – percent; ≥ – greater than or equal to

As part of the soil sample collection, observations of the amount of visible vermiculite were made according to CDM-LIBBY-06, Revision 1 (CDM 2007d). In Area 2 a total of 270 point inspections for visible vermiculite were made. The following table summarizes the relative amounts of vermiculite observed in these areas, and Figure 2-5 shows the individual point inspections where vermiculite was observed.

Summary of Visible Vermiculite Observations in Area 2

Location	Total Number of	Relative Amount of Vermiculite Observed			
	Visual Point Inspections	None	Low	Medium	High
Area 2	270	242	28	0	0

As the summary table above indicates vermiculite was not observed at the majority (89.6%) of the point inspections. Low levels of vermiculite were observed at 10.4% of the point inspections in Area 2.

#### 2.2.6 Area 2 Quick Response Removal Event - May 2008

In May 2008, EPA excavated soil required to place foundation footings and a full concrete slab to assist the City of Libby with the construction of a new pavilion in Area 2. Two areas, adjacent to each other were excavated. The area requiring excavation for the footings was excavated to an approximate depth of 57 inches bgs. Approximately 808 cubic yards (yd³) of material was excavated from this area. The second area was excavated to provide an access ramp. Approximately 21 yd³ of material was excavated from this area. Restoration activities were performed by the City of Libby using 3 inches of EPA-approved common fill compacted to 95% of standard Proctor. Confirmation soil samples were not collected at the bottom of these excavations.

#### 2.2.7 Area 2 Quick Response Removal Event – July 2008

On June 30, 2008, several small areas containing medium to high amounts of vermiculite as well has what appeared to be raw LA were found on the surface of the gravel driveway, parking area, and the eastern portion of City Service Road. The type of vermiculite observed in this area was unlike any previously observed at this site, and it is suspected the vermiculite was imported as it was not observed during the September 2007 sampling events conducted in this area. The vermiculite was removed from the surface in these areas via hand pick up and surface vacuum of the areas where the material was observed. EPA approved the use of visual inspection as the clearance criteria for these areas; no vermiculite was observed in these areas after the removal was completed.

## 2.3 Area 3 Embankment Investigation Activities – September 2007

#### 2.3.1 Surface Soil Sampling

A total of 22, 30-point composite surface samples (0-6 inches bgs) were collected from Area 3 embankment areas during 2007 investigation activities. The samples were collected using a grid; the sample results for each sampling grid are shown in Figure 2-5 (PLM-VE only) and summarized in Table 2-26 (PLM-VE only). All samples were submitted for PLM –VE, and PLM-Grav, as applicable. The following table summarizes the number of samples with detectable levels of LA.



Summary of PLM Results in the Area 3 Embankments					
Location	Number of Samples Collected	Number of Samples With PLM-VE Detections of LA			
	Collected	ND	TR	<1%	≥1%
Area 3 - Embankments	22	19	2	1	0

Notes: PLM – polarized light microscopy; LA – Libby amphibole; VE – visual estimation; Grav – gravimetric; ND – non-detect; TR – trace; < – less than; % – percent; ≥ – greater than or equal to

As part of the soil sample collection, observations of the amount of visible vermiculite were made according to CDM-LIBBY-06, Revision 1 (CDM 2007d). In the embankment areas, a total of 660 point inspections for visible vermiculite were made. The following table summarizes the relative amounts of vermiculite observed in these areas, and Figure 2-5 shows the individual point inspections where vermiculite was observed.

Summ	ary of Visible Vermicu	ılite Observation	ns in the Area	3 Embankmen	ts
Location	Total Number of	Relative Amount of Vermiculite Observed			
	Visual Point Inspections	None	Low	Medium	High
Area 3 – Embankments	660	584	58	14	4

As the summary table above indicates, vermiculite was not observed at the majority (88.5%) of point inspections in the Area 3 embankments. Low levels of vermiculite were observed at 8.8% of the point inspections; medium levels were observed at 2.1%; and high levels of vermiculite were observed at 0.6% of the embankment point inspections.

## 2.3.2 Subsurface Soil Sampling

As part of the sampling efforts conducted in the Area 3 embankment areas, 15 grab soil samples were collected from 0 to 24 inches bgs. The purpose of these samples was to determine if large quantities of vermiculite were used to construct the embankments. These samples were submitted for analysis using PLM-VE and PLM-Grav, as applicable. LA results ranged from ND to trace and vermiculite was not observed in any of the 15 samples. Table 2-27 summarizes the PLM-VE results of these samples.

## 2.4 Other OU1 Investigation Activities

To estimate the human health risk associated with inhalation of LA in outdoor ambient air in and around the City of Libby, an outdoor ambient air monitoring program was designed for OU4. The details regarding sampling collection and methodologies are described in two documents:



- Final, Revision 1 Sampling and Analysis Plan for Outdoor Ambient Air Monitoring at the Libby Asbestos Site, Operable Unit 4, Libby (OU4 Ambient Air SAP [CDM and SRC 2006])
- Final Addendum, Sampling and Analysis Plan for Outdoor Ambient Air Monitoring at the Libby Asbestos Site, Former Processing Areas, Operable Units 1, 2, 5, and 6, Libby (Processing Areas Ambient Air SAP [CDM and SRC 2007])

All ambient air samples collected in accordance with these two documents were analyzed by TEM using ISO 10312 counting rules as modified by project specific laboratory modifications. The sampling frequency at each of the locations varied throughout the ambient air program. From October 2006 to October 2007, samples were collected on a 10 day schedule (5 days of sample collection followed by 5 days without sample collection). From November 2007 to January 2008, samples were collected on a 15 day schedule (5 days of sample collection followed by 10 days without sample collection).

For the purpose of estimating LA concentrations in outdoor ambient air specific to OU1, the four Libby Site-wide sampling locations nearest to OU1 were identified as follows:

- L1 1915 Kootenai River Road
- L2 247 Indian Head Road
- L4 501 Mineral Avenue
- L5 1427 Highway 37N/J. Neils Park

Figure 2-6 shows the location of all the ambient air sampling locations and also depicts the location of the four sampling stations used to evaluate the ambient air at OU1. There are total of 143 sample results from these four locations, as summarized in the following table (EPA 2009).

**Summary of Outdoor Ambient Air Samples** 



Sa	Total Number of	
ID Number	Address	Samples
L1	1915 Kootenai River Road	37
L2	247 Indian Head Road	30
L4	501 Mineral Avenue	38
L5	1427 Highway 37 N	38
	J. Neils Park	
	143	

As indicated in the outdoor ambient air summary report (EPA 2009) total LA data set for these sample locations, the total LA concentrations for the outdoor ambient air samples from these locations ranged from ND to 0.00016 s/cc. The average total LA concentration observed during 2006-2008 Libby Site ambient air sampling program was 0.00001 s/cc (EPA 2009). A total of 32 of the 143 samples collected from the four sampling stations listed above had total LA concentrations above 0.00001 s/cc (EPA 2009). All remaining 111 samples had total LA concentrations at or below the Libby Site average ambient air total LA concentration.

## 2.5 Quality Assurance/Quality Control

For work conducted by EPA and its contractors in Libby, quality assurance/quality control (QA/QC) measures include, but are not limited to, the collection of QC samples (such as duplicate samples and field blanks), implementation of a laboratory quality assurance (QA) program, review of project reports generated by CDM by an approved CDM QA staff member, and an auditing component to assess the effectiveness of the QA program.

The following sections describe the following QA/QC components implemented for work conducted by EPA and its contractors at OU1: collection of field QC samples; changes to procedures in guidance documents; data usability; and achievement of data quality objectives (DQOs).

All QA/QC components for measurement reports required by EPA Region 8 (i.e., precision, accuracy, representativeness, completeness, and comparability) are addressed in the Draft Quality Assurance and Quality Control Summary Report for the Libby Asbestos Superfund Site (SRC 2007).

## 2.5.1 Field Quality Control Sample Collection

#### 2.5.1.1 Air and Dust

Two types of air and dust QC samples were collected by sampling personnel: lot blanks and field blanks. These QC samples were collected in accordance with the governing documents for each sampling event as described in this section. Lot blank data collected in Libby indicate asbestos fiber counts below the detection limit of the analytical



method; therefore, air and dust cassettes were deemed usable for sampling at OU1. Libby lot blank data is provided in Appendix C. Field blank data for OU1 indicate asbestos fiber counts below the detection limit of the analytical method. OU1 field blank data is provided in Appendix D.

In addition to lot blanks and field blanks typically collected for air and dust samples, colocates samples and drying blank samples were also collected as QC samples for the ambient air program (CDM and SRC 2006). Results for ambient air co-located samples and the related paired field sample are presented in Appendix E. As shown in Appendix E, a total of 40 co-located samples were collected. LA was detected in two co-located samples and of these only one of the corresponding field samples contained LA. Because most of the results of the co-located and paired field samples results were ND for LA, concordance rates cannot be calculated.

Drying blanks were collected to determine if the process of drying wet (air sample) filters introduced any asbestos fibers to the filter prior to analysis for LA. A total of nine drying blank samples were collected; all of which were ND for LA. Results for the drying blanks are provided in Appendix F.

Overall field QC sample collection frequency and data evaluation for the Libby Site is presented in the Draft Quality Assurance and Quality Control Summary Report for the Libby Asbestos Superfund Site (SRC 2007).

#### 2.5.1.2 Soil

Equipment blanks and field duplicate samples comprise the two types of soil QC samples collected at OU1. These QC samples were collected in accordance with the governing documents for each sampling event as described in this section.

Equipment blanks were only required as part of the pre-removal sampling at Riverside Park and were collected at the required frequency of one per day. Analytical results for these field QC samples were all ND for LA (Appendix G).

Soil duplicate sample collection frequency and data evaluation for the Libby Site is presented in the Draft Quality Assurance and Quality Control Summary Report for the Libby Asbestos Superfund Site (SRC 2007). To date, field QC samples for confirmation soil sampling is not required at the Libby Site.

## 2.5.2 Field Modifications to Governing Documents

Field modifications to the governing documents were approved by EPA and implemented by field staff during activities at OU1. Signed modification forms are located at the EPA Records Center. No negative implications or biases to data have been noted as a result of these modifications. Details regarding the modifications to each governing document are provided in Appendix H.

## 2.5.3 Data Usability

Data collected at OU1 were evaluated by the EPA On-Scene Coordinator (for emergency response data) or government-contracted staff in consultation with EPA or



Volpe Center representatives. Data was not validated past that which is required by the analytical laboratories' QA/QC program.

## 2.5.4 Achievement of Data Quality Objectives

Each guidance document referenced in this report describes the DQOs identified for each data collection event conducted at OU1 or the Libby Site as a whole. Data collected under the 1999 or 2000 Phase 1 SQAPPs are under review by the EPA project team as part of the human health risk assessment; however, the general Phase 1 objectives were met. All other work plan-specific DQOs were met.



# Section 3 Physical Characteristics of the Study Area

The site encompasses an area of approximately 17 acres, and is situated on the south side of the Kootenai River, just north of the downtown area of the City of Libby, Montana (Figure 1-2). The property is bounded by the Kootenai River on the north, Highway 37 on the east, the BNSF railroad thoroughfare on the south, and State of Montana property on the west (CDM 2007a).

## 3.1 Physical Setting

#### 3.1.1 Surface Features

Area 1 is currently owned by the City of Libby and is undeveloped. In 2004, the David Thompson Search and Rescue organization constructed a building containing a main office and a five-bay garage on the northwest portion of the site on the south side of City Service Road (also known as West Thomas Street) (CDM 2007a).

Area 2 is also currently owned by the city and serves a variety of recreational visitors. The main features of the park include two boat ramps, two pavilions, picnic tables, and a pumphouse.

City Service Road is a partially paved access road for several residential and commercial properties west of the site.

## 3.1.2 Meteorology

Libby has a relatively moist climate, with annual precipitation in the valley averaging slightly over 20 inches (this includes approximately 60 inches of snowfall). Surrounding higher elevations receive significantly more precipitation. During the winter months, moist Pacific air masses generally dominate, serving to moderate temperatures and bring abundant humidity, rain, and snow. Colder, continental air masses occasionally drop temperatures significantly, but generally only for shorter periods. The average temperatures in December and January are 25 to 30 degrees Fahrenheit (°F).

During summer, the climate is warmer and dryer, with only occasional rain showers and significantly lower humidity and soil moistures. High temperatures of greater than 90°F are common. The average temperature in July is approximately 65 to 70°F. Spring and fall are transition periods.

Due to its valley location along the Kootenai River and downstream of the Libby dam, fog is common in the Libby valley. This effect is most pronounced during winter and in the mornings. Inversions, which trap stagnant air in the valley, are also common. Winds in the Libby valley are generally light, averaging approximately 6 to 7 miles per hour. Prevailing winds are from the WNW, but daily wind direction is



significantly affected by temperature differences brought about by the large amount of vertical relief surrounding the area.

## 3.1.3 Surface Water Hydrology

The Kootenai River, which flows adjacent to the site, has its origins in British Columbia's Kootenay National Park in Canada. From there it flows 485 miles into northwest Montana and through the towns of Libby and Troy. From there it flows into northern Idaho, then back into Canada and Kootenay Lake. Ultimately it joins with the Columbia River. Sixteen miles north of Libby, the river is held back by Libby Dam, creating a 90-mile long reservoir called Lake Koocanusa which reaches into Canada (LibbyMT.com. 2007).

As previously stated, Libby has a relatively moist climate with annual valley precipitation slightly over 20 inches. Higher elevations receive significantly more precipitation and account for much of the creek flow. Seasonal fluctuations cause varying levels of runoff and creek flow. Typically, runoff is most significant in spring when snow at higher elevations begins to melt. Summer precipitation does occur; however, typical summer weather is hot and dry and creek flow is moderated by high elevation lakes.

## 3.1.4 Geology

The mountains surrounding Libby are generally composed of folded, faulted, and metamorphosed blocks of Precambrian sedimentary rocks and minor basaltic intrusions. Primary rock types are meta-sedimentary argillites, quartzites, and marbles (Ferreira et al. 1992).

Excluding vermiculite-related materials that may be present, x-ray diffraction (XRD) analyses by the USGS of shallow, subsurface soil from more than ten sites in the Libby area show that it is comprised of major (greater than 20%) quartz, minor (5-20%) muscovite (and/or illite) and albitic feldspar, trace (<5%) orthoclase, clinoclore, non-fibrous amphibole (likely magnesiohornblende), calcite, amorphous material (probably organic) and possible pyrite and hematite. Other minerals will be present at levels below 0.5% and are generally not detectable by routine XRD analysis. These mineral components represent the average components for the area and will vary to some extent depending on location and history. Surface soil contains the above components with the addition of more organic material (USGS 2002).

The vermiculite deposit located at Vermiculite Mountain, the source of LA, is located approximately 7 miles northwest of the town of Libby in the Rainy Creek drainage. The vermiculite deposit specific to the Libby Mine is classified as a deposit within a large ultramafic intrusion, such as pyroxenite plutons, which is zoned and cut by syenite or alkalic granite and by carbonatitic rock and pegmatite. The formation of vermiculite and asbestiform amphiboles in the Libby mine deposit, have been assessed to be the result of the alteration of augite by high-temperature silica-rich solutions (USGS 2002).



The Vermiculite Mountain deposit is contained within the Rainy Creek alkalineultramafic complex. The Rainy Creek complex is described as the upper portion of a hydrothermally altered alkalic igneous complex composed primarily of magnetite pyroxenite, biotite, pyroxenite, and biotititie. The original ultramafic body is an intrusion into the Precambrian Belt Series of northwestern Montana with a syenite body southwest of the adjacent to the altered pyroxenite and is associated with numerous syenite dikes that cut the pyroxenites.

#### 3.1.5 Soil

Soil is largely derived from the pre-Cambrian rocks, which break down to form loamy soil composed of sand and silt with minor amounts of clay. The Libby valley area is somewhat enriched in clays due to its river valley location, and the dense forest of the region contributes organic matter to the soil. Much of the original soil in the area now occupied by the town of Libby has been modified by human activities. These include addition of vermiculite from the Rainy Creek Complex to the soil, reworking of the soil during construction, road building, railroad operations, gardening, processing of vermiculite (i.e., expansion), and other activities. Soil generally varies in color from tan to gray to black.

## 3.1.6 Hydrogeology

The Libby basin is hydrologically bound to the west by the pre-Cambrian bedrock, to the north by the Kootenai River and to the east by Libby Creek. The southern boundary of the basin extends under the high terrace of glacial lake bed sediments and with the alluvium of Libby Creek (Woodward-Clyde Consultants 1988).

The sediments overlying bedrock in the vicinity of the town of Libby are of glacial, glaciofluvial or alluvial origins. The site stratigraphy is characterized by lenses of interbedded units consisting of gravels, sands, and silty to clayey gravels and sands. These units are the result of numerous episodes of alluvial and glacial erosion and deposition. Types of depositional environments likely to have existed in the Libby area include braided stream, overbank, splay, point bar, till, moraine, outwash, loess (Aeolian), channel, and lucustrine. These environments moved in time and space, occurred contemporaneously, cancelled each other out (by erosion) and varied drastically in the level of energy and capacity to sort the available clastic material (Woodward-Clyde Consultants 1988).

Specifics regarding the depth to groundwater at OU1 and the formations underlying OU1 are unknown.

## 3.1.7 Demography and Land Use

Currently, the portion of land south of City Service Road is owned by the City of Libby and is undeveloped; however, a small section of the site is currently used by David Thompson Search and Rescue. In 2004, the search and rescue organization constructed a building containing a main office and a five-bay garage on the northwest portion of the site on the south side of City Service Road. The organization performs various types of search and rescue activities. The garage is used for storing search and rescue equipment and vehicles. Several other agencies, including local



and state law enforcement, also hold meetings in the main office. It is estimated that approximately 100 volunteers utilize this space on occasion throughout the year. It has been reported that the city stockpiles street sweepings and snow in this area as part of regular city maintenance activities. Access to this area is restricted by construction fencing, and EPA has provided guidance to the city regarding the use of caution when conducting any activities at the site that disturb soil. Permanent future redevelopment plans for this portion of OU1 are currently unknown.

The portion of land north of City Service Road is also currently owned by the city and serves a variety of recreational visitors. The main features of the park include two boat ramps, a pavilion, picnic tables, and a pumphouse. The newer of the two boat ramps is used by recreational boaters and commercial fishing outfitters; the older ramp is not commonly used due to swift current at its approach. The pumphouse (see Figure 1-3) houses a pump that draws non-potable water from the Kootenai River. The pump was installed jointly by the City of Libby and Lincoln County in 1999 to provide a backup water source to local fire departments. The pumphouse is accessed by city personnel in order to perform maintenance on the pump. The pump is connected to an external water spigot, which is used by the city to draw water for street sweeping and other maintenance operations, and other workers (such as employees of local fill pits and contractors working on EPA's removal program) to draw water primarily for use in dust suppression equipment (CDM 2007a).

## 3.2 Ecology

#### 3.2.1 Terrestrial Animals

According to the United States Forest Service, the forested areas surrounding Libby have a great diversity of over 350 fish, mammals, birds, reptiles, and amphibians.

Even though there are a variety of animals present in the forested areas surrounding Libby, it is unlikely that many of these animals would be encountered at the site since the site is partially developed, inhabited by humans, and is located within the downtown core. Several of the terrestrial animals that have been encountered at the site include but are not limited to mule and white tail deer, red squirrels, and common garter snakes.

#### 3.2.2 Terrestrial Plants

Libby and the surrounding area exhibit tree and grass plant species that are dominant within the Kootenai National Forest. Terrestrial plant species found at OU1 are dominated by common grass species.

## 3.2.3 Presence of Threatened, Endangered, and Protected Species

Even though there are endangered or threatened plants and animals that may be present in the forested areas surrounding Libby, it is unlikely that most would be encountered at the site.

Bald eagles have been seen in close proximity to OU1. Bald eagles were removed from the endangered and threatened species list in 2007, but are still a protected



species under the Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act.



# Section 4 Nature and Extent of Contamination

This section summarizes the current nature and extent of LA detected at OU1 and is organized to present results for each of the contaminated media of concern identified in the site-specific CSM detailed in Section 6. While Section 2 presents information on a large number of past removal and investigation activities, this section only presents data that represent the current status of the site.

#### 4.1 LA in Indoor Air

As previously mentioned, there are only two buildings currently within the boundary of the site: the pump house in Area 2, and the search and rescue support building in Area 1. Only the search and rescue support building is consistently occupied. As discussed in Section 2.1.11.3, indoor ABS was conducted to estimate levels of LA encountered during human exposures. Of the 22 samples collected, LA was observed in 18 (81.8%) of the samples collected. Below is a summary of the concentrations of total LA observed and the frequency of LA detections for each scenario/area sample.

Summary of OU1Search and Rescue Building Indoor ABS Air Sampling					
ABS Location	ABS Activity Type	Total Number of Samples Collected	Total Number of Samples with Detections of LA	Range of Total LA Concentrations (s/cc)	
Garage	Active	16	12	ND to 0.0699	
Meeting Room	Active	3	3	0.0011 to 0.0088	
	Passive	3	3	0.0003 to 0.0079	

Notes: OU1 – Operable Unit 1; ABS – activity-based sampling; LA – Libby amphibole; s/cc – structures per cubic centimeter; ND – non-detect

No additional data collection is required to assess this media specific to OU1. Conclusions regarding the risks associated with these observed concentrations are described in Section 6.

### 4.2 LA in Indoor Dust

This section presents results for the search and rescue support building only, because all other buildings on the site have been demolished and removed and the pumphouse is not consistently occupied.

As part of the indoor ABS activities, microvacuum dust samples were collected. A total of nine dust samples were collected from the building search and rescue support building, three each for the garage, meeting room, and response vehicles. Of the nine samples collected, LA was observed in two samples:



- EP-00106 collected in the garage area had a total LA loading of 20 s/cm²
- EP-00145 collected in the meeting room had a total LA loading of 75 s/cm²

Below is a summary of the concentrations of total LA observed and the frequency of LA detections in the 2007 indoor dust samples:

Summary of OU1 Indoor Dust Sampling				
Sample Location  Total Number of Samples Collected  Samples with LA Concentrations (s/cm²)				
Garage	3	1	ND to 20	
Meeting Room	3	1	ND to 75	
Response Vehicles	3	0	ND	

Notes: OU1 – Operable Unit 1; LA – Libby amphibole; s/cm² – structures per square centimeter; ND – non-detect

No additional data collection is required to assess this media specific to OU1. Conclusions regarding the risks associated with these observed concentrations are described in Section 6.

#### 4.3 LA in Outdoor Air

Potential exposures to outdoor air at OU1 were estimated for ambient air and air near disturbed soil. This section summarizes the sample results for both of these exposure pathways specific to OU1.

#### 4.3.1 LA in Outdoor Ambient Air

The specific outdoor ambient air sampling locations used to estimate the total LA concentrations in outdoor ambient air at OU1 are discussed in Section 2.3. The total LA concentration in outdoor ambient air has been observed at levels ranging from ND to 0.00016 s/cc in the four sample locations closest to OU1 (EPA 2009). Of 143 samples, LA was observed in 32 (22.4%) of the samples collected. Below is a summary of the concentrations of total LA observed and the frequency of LA detections for each of the four locations.



	Summary of Ambient Air Sampling					
	Sample Location	Total Number of	Total Number of	Range of Total LA		
ID	Address	Samples	Samples with LA	Concentrations (s/cc)		
L1	1915 Kootenai River	37	5	ND to 0.00016		
L2	247 Indian Head Road	30	7	ND to 0.00012		
L4	501 Mineral Ave	38	11	ND to 0.00012		
L5	1427 Highway 37 N	38	9	ND to 0.000079		
	J. Neils Park					

Notes: LA – Libby amphibole; s/cc – structures per cubic centimeter; ND – non-detect; Data summarized from Summary of Outdoor Ambient Air Monitoring for Asbestos at the Libby Asbestos Site, Libby, Montana (October 2006 to June 2008) (EPA 2009)

No additional data collection is required to assess this media specific to OU1. Conclusions regarding the risks associated with these observed concentrations are described in Section 6.

#### 4.3.2 LA in Outdoor Air near Disturbed Soil

To estimate the potential exposures to LA in outdoor air near disturbed soil at OU1, eight personal air samples were collected as described in Section 2.1.11.4 during bush hogging activities. Most of the ground was wetted before bush hogging to suppress dust releases. Consequently, the amount of LA released may have been lower than if the disturbance had occurred when the ground was dry.

LA was observed in a total of six (75%) of the samples collected. Total LA concentrations ranged from ND to 0.0715 s/cc. Conclusions regarding the risks associated with these observed concentrations are described in Section 6.

### 4.4 LA in Soil

Surface and subsurface soil containing visible vermiculite and/or detectable levels of LA are present at OU1. The top portion of figure 4-1 illustrates the portions of Area 1 and Area 2 where contaminated soil has been removed, and also shows areas of residual contamination in subsurface soil. It should be noted that analytical results of confirmation soil samples collected within the excavated areas indicate LA is present at depth at concentrations equal to or below EPA's action level for soil, as detailed in Section 2. The bottom portion of Figure 4-1 also shows the results of the most recent surface soil sampling event conducted at the site (in 2007).

As discussed in Sections 2.1.11.1, 2.2.5 and 2.3.1, the LA concentration in current surface soil within OU1 is either ND, trace, or <1%. However visible vermiculite remains at the surface across the site. Vermiculite containing soil is present across the surface of the site for the following reasons:

1) Visible vermiculite in low levels was not a clean-up trigger at the time the removals were conducted



2) Site work conducted after the removal action was completed, has caused vermiculite containing soil previously existing in the subsurface to have been brought to the surface during excavation activities

Subsurface vermiculite containing soil remains at varying levels as a result of previous mining-related processes conducted at the site. Anecdotal information suggests that as much as 20 to 30 feet of fill material, some originating from the mine, was used to increase the elevation of OU1. Figure 4-1 (bottom portion) indicates locations where visible vermiculite has been observed and documented by field personnel; lack of such notation is not an indicator that vermiculite was not observed and/or is currently not present. Figure 4-1 (top portion) also indicates the location of orange snow fencing used as a visual indication at maximum excavation depths where vermiculite containing soil was encountered during removal activities conducted by EPA.

No additional data collection is required to assess this media specific to OU1. Conclusions regarding the risks associated with these observed concentrations are described in Section 6.

## 4.5 Summary

LA has been observed in all the media sampled at the site: indoor air, indoor dust, outdoor ambient air, outdoor air near disturbed soil, and surface and subsurface soil. The following table summarizes the observations of total LA concentrations for each media evaluated for OU1 that are most relevant to the current status of the site:

Summary of Post Removal LA Results Per Media Representing the Current Status of OU1				
Media	Total Number of Samples Collected	Total Number of Samples with Detections of LA	Percentage of Samples with LA Observed (%)	Range of LA Results
Indoor Air (Section 2.1.11.3)	22	18	81.8	ND to 0.0699 s/cc
Indoor Dust (Section 2.1.11.3)	9	2	22.2	ND to 75 s/cm <sup>2</sup>
Outdoor Ambient Air* (Section 2.4)	143	32	22.4	ND to 0.00016 s/cc
Outdoor Air Near Disturbed Soil (Section 2.1.11.4)	8	6	75.0	ND to 0.0715 s/cc
Surface Soil** (Sections 2.1.11.1,2.2.5, 2.3.1)	73	16	21.9	ND to <1%

Notes: LA – Libby amphibole; OU1 – Operable Unit 1; < - less than; % - percent; ND – non-detect; s/cc – structures per cubic centimeter; s/cm2 – structures per square centimeter;\* Data summarized from Summary of Outdoor Ambient Air Monitoring for Asbestos at the Libby Asbestos Site, Libby, Montana (October 2006 to June 2008) (EPA 2009); \*\* Soil result summary is for only PLM-VE results only



Key findings from OU1 sampling, as related to the present condition of the site, include the following (see Section 6 for further details regarding estimated risks associated with the observed levels):

- LA has been observed in indoor air and indoor dust samples at the search and rescue support building.
- LA has been observed in indoor air at the site collected during ABS activities within the garage and meeting room areas of the search and rescue support building.
- LA has been observed in outdoor ambient air samples collected near OU1.
- LA has been observed in personal air samples collected during bush hogging activities within the boundary of OU1.
- Current surface soil within the OU1 boundary contains LA at ND, trace, or <1% levels (Figure 4-1 bottom portion).
- Current surface soil within the OU1 boundary contains visible vermiculite (Figure 4-1 bottom portion).
- Subsurface soil is known to contain vermiculite, the exact location and depths of vermiculite containing soil are not fully documented or delineated.



# Section 5 Contaminant Fate and Transport

Evaluation of fate and transport of vermiculite, vermiculite concentrate, and LA is based on results of site physical characteristics, source characteristics, and extent of contamination investigations. This section provides a discussion of the important factors involved in fate and transport of vermiculite, vermiculite concentrate, and LA at the site.

## 5.1 Contaminant Persistence and Transport

Information related to the persistence of LA structures in the environment is not fully understood or researched. Discussions in this section summarize the observations available for asbestos fibers in general where information specific to the persistence of LA in the environment does not exist.

Asbestos fibers are not volatile and are insoluble. Because of these characteristics asbestos fibers tend to settle out of air and water, and deposit in soil or sediment (EPA 1977, 1979 after ATSDR 2001a). However, it has been documented that small fibers can remain suspended in both air and water for long periods of time and be transported long distances (Jaenicke 1980 and EPA 1979 after ATSDR 2001a). The degradation of asbestos in the environment occurs slowly, if at all (NRC 1984 after ATSDR 2001a), and is thought to exist in the environment unchanged for long periods of time following release.

Once airborne, a number of factors (thickness, length, and static charge) influence how long an asbestos fiber will remain in the air. The most important factor is the thickness of the particle (EPA 2003). Most LA particles observed in air in Libby have a thickness in the range of 0.1 to 1.0  $\mu$ m, with an average of around 0.4  $\mu$ m. In air that is moving, asbestos particles of around 0.5  $\mu$ m in thickness will typically fall out of the air and be re-deposited on surfaces with a "half time" of about 2 hours.

The half time is a measure of how long it takes for the concentration of a material to decrease by 50%. For example, if the starting concentration were 0.001~s/cc, and the half time were 2 hours, after 2 hours the concentration would be 0.0005~s/cc, after 4 hours the concentration would be 0.00025~s/cc, etc. Particles at the low end of the thickness range (closer to  $0.1~\mu\text{m}$ ) may remain suspended for significantly longer (half-time of about 40 hours), while fibers at the high end of the thickness range (closer to 1 micron) will tend to fall out more quickly (half time of about 30 minutes) (Baron 2004).

These calculated estimates of residence time in air are generally consistent with observations from field studies of asbestos residence time in air. For example, the Grace performed "drop tests" to see how much asbestos was in air at varying times after dropping some vermiculite on the ground. The results indicated that concentrations in air rose for about 5-10 minutes (this increase was probably due to the mixing effect), and then fell with a half time of about 30 minutes (Grace 1976). In

another case, Versar performed a series of studies for the EPA in which vermiculite insulation in attics was disturbed and asbestos concentrations in air were measured over time. Based on their data, Versar concluded that most asbestos fibers settle from attic air within about 24 hours (Versar 2003).

As long as an LA particle remains in air, it will tend to move in the same way that the air moves. This means that concentrations of LA will initially be highest at the point where the disturbance occurred, but will tend to decrease after time as the particles are moved about by air currents. In indoor air, the time that it takes for LA particles to mix in the air of a room depends on how much airflow there is, but mixing would usually be expected within about 5 to 30 minutes (Nazaroff 2005).

Coarse particles of asbestos and/or vermiculite can erode through physical processes such as weathering and/or crushing into smaller particles of asbestos and become airborne. Asbestos fibers and/or vermiculite are not known to migrate through soil, as such asbestos and/or vermiculite at depth do not pose an exposure risk to receptors at this site unless it becomes disturbed by intrusive human activities (i.e, underground utility installation and/or maintenance).

When a release occurs in outdoor air, the degree of mixing and transport will depend mainly on wind speed. If the air is completely calm, the concentration might remain elevated near the source for several hours. If the wind is blowing, the particles will tend to be rapidly dispersed away from the source of release.

The fate of asbestos and vermiculite in water follows the fate of most particles: fine particles can travel with the water phase for long distances; coarse particles tend to settle out and be transported with sediment.



## **Section 6**

## **Baseline Human Health Risk Assessment**

This section is a baseline human health risk assessment for OU1 of the Libby Site. The risk assessment uses available data to estimate the health risks to people who may breathe asbestos in air while working in or visiting OU1, either now or in the future, based on the conditions that currently exist within OU1. The methods used to evaluate human health risks from asbestos are in basic accord with EPA guidelines for evaluating risks at Superfund sites (EPA 1989), including recent guidance (EPA 2008) that has been specifically developed to support evaluations of exposure and risk from asbestos.

It is important to recognize that many people exposed to asbestos at OU1 likely will also be exposed to asbestos at other locations in and around Libby. While this risk assessment focuses exclusively on risks at OU1, the cumulative risks from exposure pathways that may occur in other OUs will be addressed in the future.

## 6.1 Background Information on Asbestos

## 6.1.1 Asbestos Mineralogy

Asbestos is the generic name for the fibrous habit of a broad family of naturally occurring poly-silicate minerals. Based on crystal structure, asbestos minerals are usually divided into two groups: serpentine and amphibole.

- Serpentine: The only asbestos mineral in the serpentine group is chrysotile. Chrysotile is the most widely used form of asbestos, accounting for about 90% of the asbestos used in commercial products (International Agency for Research on Cancer [IARC] 1977). There is no evidence that chrysotile occurs in the Libby vermiculite deposit, although it may be present in some types of building materials in Libby.
- Amphiboles: Five minerals in the amphibole group that occur in the asbestiform habit have found limited use in commercial products (IARC 1977), including:
  - actinolite
  - amosite
  - anthophyllite
  - crocidolite
  - tremolite

At the Libby site, the form of asbestos that is present in the vermiculite deposit is an amphibole asbestos that for many years was classified as tremolite/actinolite (e.g., McDonald et al 1986a, Amandus and Wheeler 1987). More recently, USGS performed electron probe micro-analysis and x-ray diffraction analysis of 30 samples obtained from asbestos veins at the mine (Meeker et al. 2003). Using mineralogical naming rules recommended by Leake et al. (1997), the results indicate that the asbestos at

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Libby includes a number of related amphibole types. The most common forms are winchite and richterite, with lower levels of tremolite, actinolite, and magnesioriebeckite. Because the mineralogical name changes that have occurred over the years do not alter the asbestos material that is present in Libby, and because EPA does not find that there are toxicological data to distinguish differences in toxicity among these different forms, the EPA does not believe that it is important to attempt to distinguish among these various amphibole types. Therefore, EPA simply refers to the mixture as LA.

## 6.1.2 Measurement Techniques for Asbestos in Air

In the past, the most common technique for measuring asbestos in air was PCM. In this technique, air is drawn through a filter and airborne particles become deposited on the face of the filter. All structures that have a length greater than 5  $\mu$ m and have an aspect ratio (the ratio of length to width) of 3:1 or more are counted as PCM fibers. The limit of resolution of PCM is about 0.25  $\mu$ m, so particles thinner than this are generally not observable.

A key limitation of PCM is that particle discrimination is based only on size and shape. Because of this, it is not possible to classify asbestos particles by mineral type, or even to distinguish between asbestos and non-asbestos particles. For this reason, nearly all samples of air collected in Libby are analyzed by TEM. This method operates at higher magnification (typically about 15,000 times) and hence is able to detect structures much smaller than can been seen by PCM. In addition, TEM instruments are fitted with accessories that allow each particle to be classified according to mineral type.

In some cases, it may be desirable to utilize results from a TEM analysis to estimate what would have been detected had the sample been analyzed by PCM. For convenience, particles detected under TEM that meet the rules for PCM are referred to as PCM-equivalent (PCME).

## 6.2 Basis for Concern

Vermiculite from the mine in Libby is contaminated with LA. Historic mining, milling, processing and transport of vermiculite at Libby are known to have caused releases of both vermiculite and LA to the environment. Inhalation of LA is known to have caused a range of adverse health effects in exposed humans, including workers at the mine and processing facilities (Lockey et al. 1984, Amandus and Wheeler 1987, McDonald et al. 1986a, McDonald et al. 2004, Sullivan 2007, Rohs et al. 2007), as well as residents of Libby (Peipins et al. 2003). Based on these adverse effects, EPA listed the Libby Asbestos Site on the National Priorities List in October 2002.

OU1 was contaminated with LA in a number of ways. When the area was occupied by the Export Plant: 1) substantial quantities of vermiculite were stockpiled and staged there in order to support shipment to other locations around the country; 2) exfoliation waste product (i.e., stoner rock) containing LA was buried there; and 3) smaller quantities of LA were possibly tested there for product development



purposes. As a consequence of the operations at the Export Plant, substantial quantities of vermiculite were lost or spilled and became mixed into the soil of OU1. Because the vermiculite and exfoliation waste product both contain LA, this substantially contaminated the soil with LA fibers. Data on the levels of contamination that have been observed in soils at OU1 are presented in Section 4.4.

## 6.3 Conceptual Site Model

Figure 6-1 presents the CSM for how humans may be exposed to LA at OU1. Key elements of the model are described below.

#### 6.3.1 Contaminated Media

As noted above, when OU1 was occupied by the Export Plant, substantial quantities of vermiculite and LA became mixed into the soil. Although EPA has undertaken extensive cleanup activities at OU1 (including demolition of the former Export Plant buildings and other contaminated structures), as well as excavation and replacement of surface material at a number of locations across the OU, the surface soil remains contaminated with visible vermiculite in a number of locations (see Section 2.1.11.1 and Figure 2-5). In addition, vermiculite may remain buried at depth in some areas, which could serve as a source of release in the future if excavation activities brought contaminated material to the surface.

#### 6.3.2 Land Use

Currently OU1 is owned by the City of Libby and is mainly undeveloped except for the David Thompson Search and Rescue Facility, boat launch facilities along the Kootenai River, and two public pavilions. The City has considered developing a large portion of OU1 into a public park.

## 6.3.3 Exposed Populations

Based on the current and potential future land use at OU1, people who are most likely to be exposed on a regular basis include:

- Volunteers who staff the David Thompson Search and Rescue Facility
- Fishing guides who launch fishing boats from the boat launch facility in OU1
- Local residents who visit OU1 for recreational purposes, either now or in the future (especially if it is converted by the City into a public park)
- City workers who perform maintenance activities at OU1, either now or in the future
- Potential future commercial workers (if the site is developed for commercial rather than recreational purposes)
- Potential future construction workers (if future development includes construction of new buildings or facilities)



Exposures of other people who visit OU1 on a less frequent basis (e.g., out of town visitors, fishermen who go on float trips originating at the boat launch ramp, etc.) would be less frequent and less extensive than the exposures for the populations described above.

### **6.3.4 Exposure Routes**

People who visit or work at OU1 may be exposed to LA either by incidental ingestion of contaminated soil or by inhalation of air that contains LA fibers. Of these two pathways, inhalation exposure is considered to be of greatest concern. To the extent that incidental ingestion exposure of LA in soil may occur, the added risk from this pathway is expected to be small compared to the risk from the inhalation pathway.

## 6.3.5 Exposure Pathways

LA fibers may become airborne in a number of ways. This may include natural forces such as wind blowing over a contaminated soil, or human activities such as sweeping up dust indoors or mowing, raking, or digging in areas of contaminated outdoor soil. The amount of LA in air, and hence the amount inhaled, will vary depending on the level of LA in the source and also on the intensity and duration of the disturbing force.

For the purposes of exposure assessment, it is convenient to stratify inhalation exposures according to source material (e.g., outdoor soil, indoor dust) and according to activity (e.g., active disturbance vs. passive behavior). Based on this approach, the exposures of chief concern for each of the exposed populations are as follows:

- Volunteers at the David Thompson Search and Rescue Facility may be exposed both while inside the facility and while working outside in the vicinity of the building. At both locations, exposures may occur during both active and passive behaviors.
- Fishing guides who launch boats from the boat launch ramp are expected to be exposed only outdoors. Because the boat ramp is paved, exposures from soil disturbance are likely to be low, but could occur as a result of disturbing dust from OU1 that has fallen onto the ramp. Likewise, fishing guides might be exposed by disturbing soil when parking their vehicles in non-paved areas.
- Current or future recreational visitors to OU1 (park visitors) are also assumed to be exposed only outdoors. It is assumed that park visitors might engage in a wide variety of different types of behaviors, ranging from passive (e.g., sitting at a picnic table) to active (e.g., playing sports, a child digging in the soil).
- City maintenance workers are assumed to engage in a variety of activities at OU1, the most common of which would be lawn care and repair or maintenance of facilities. This might include occasional work inside the David Thompson building or in the pump house, but because neither building contains vermiculite insulation and because such indoor exposures are likely to be infrequent, any indoor



exposures are likely to be a minor source of exposure compared to exposures that occur outdoors while maintaining the park. Consequently, these potential indoor exposures are not evaluated quantitatively for the maintenance worker.

- Potential future commercial workers are assumed to be exposed mainly outdoors in areas of contaminated soil, since any newly constructed buildings would not contain vermiculite or LA. However, exposure could also occur inside if the interior of the workplace became contaminated by track-in of contaminated outdoor soil.
- Potential future construction workers are likely to be exposed to LA in outdoor air as a consequence of activities such as soil grading and excavation that could disturb both the surface and the subsurface soils.

Note that all individuals who visit the OU by car might be exposed by transfer of contaminated soil from the OU into the car, followed by subsequent inhalation exposure while driving. The significance of this exposure pathway is currently unknown, but may be investigated in the future to support evaluation of cumulative Libby Site-wide risk.

## **6.4 Toxicity Assessment**

The adverse effects of asbestos exposure in humans have been the subject of a large number of studies and publications. The following section is intended to provide a brief overview of the main types of adverse health effects that have been observed in humans. More detailed reviews of the literature are provided in IARC (1977), World Health Organization (WHO) (2000), and ATSDR (2001, 2004).

#### 6.4.1 Non-Cancer Effects

#### 6.4.1.1 Asbestosis

Asbestosis is a chronic pneumoconiosis associated with inhalation exposure to asbestos. It is characterized by the gradual formation of scar tissue in the lung parenchyma. Initially the scarring may be minor and localized within the basal areas, but as the disease develops, the lungs may develop extensive diffuse alveolar and interstitial fibrosis (American Thoracic Society 1986).

Build-up of scar tissue in the lung parenchyma results in a loss of normal elasticity in the lung which can lead to the progressive loss of lung function. The initial symptoms of asbestosis are shortness of breath, particularly during exertion. People with fully developed asbestosis tend to have increased difficulty breathing that is often accompanied by coughing or rales. In severe cases, impaired respiratory function can lead to death.

Asbestosis generally takes a long time to develop, with a latency period from 10 to 20 years. Mossman and Churg (1998) suggest that latency is inversely proportional to exposure level. The disease may continue to progress long after exposure has ceased



(ATSDR 2001). The progression of the disease after cessation of exposure also appears to be related to the level and duration of exposure (American Thoracic Society 2004).

#### 6.4.1.2 Pleural Abnormalities

Exposure to asbestos may induce several types of abnormality in the pleura (the membrane surrounding the lungs).

- Pleural effusions are areas where excess fluid accumulates in the pleural space.
   Most pleural effusions last several months, although they may be recurrent.
- Pleural plaques are acellular collagenous deposits, often with calcification. Pleural plaques are the most common manifestations of asbestos exposure (ATSDR 2001, American Thoracic Society 2004).
- Diffuse pleural thickening is a noncircumscribed fibrous thickening of the visceral pleura with areas of adherence to the parietal pleura. Diffuse thickening may be extensive and cover a whole lobe or even an entire lung. Infolding of thickened visceral pleura may result in collapse of the intervening lung parenchyma (rounded atelectasis). Gevenois et al. (1998) and Schwartz et al. (1991) report that diffuse pleural thickening may occur as a result of pleural effusions.

Pleural effusions and plaques are generally asymptomatic, although rarely they may be associated with decreased ventilatory capacity, fever, and pain (e.g., Bourbeau et al. 1990). Diffuse pleural thickening can cause decreased ventilatory capacity (Baker et al. 1985, Churg 1986, Jarvholm and Larsson 1988). Severe effects are rare, although Miller et al. (1983) reported on severe cases of pleural thickening that led to death.

The latency period for pleural abnormalities is usually about 10 to 40 years (American Thoracic Society 2004), although pleural effusions may occasionally develop as early as one year after first exposure (Epler and Gaensler 1982).

#### 6.4.1.3 Other Non-Cancer Effects

Some epidemiological studies provide evidence that chronic exposure to asbestos can increase the risk of several other types of non-cancer effects including cor pulmonale (right-sided heart failure), retroperitoneal fibrosis (a fibrous mass in the back of the abdomen that blocks the flow of urine from the kidneys to the bladder), depressed cell-mediated immunity (ATSDR 2001), and autoimmune disease (Pfau et al. 2005, Noonan et al. 2006).

## 6.4.1.4 Observations of Asbestos-Related Non-Cancer Diseases in People Exposed to LA

Non-Malignant Respiratory Disease (NMRD)

Amandus and Wheeler (1987), McDonald et al. (1986a, 2004), and Sullivan (2007) studied the cause of death in workers exposed to LA while working at the vermiculite mine and mill at Libby. Each of these researchers reported that Libby workers were more likely to die of NMRD (i.e., asbestosis, chronic obstructive pulmonary disease,

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pneumonia, tuberculosis and emphysema) compared to the general U.S. population (white males), supporting the conclusion that exposure to LA increases risk of non-malignant lung disease.

#### Pleural Abnormalities

Armstrong et al. (1988), McDonald et al. (1986b) and Amandus et al. (1987) evaluated the prevalence of chest radiographic changes in workers exposed to LA while working at the vermiculite mine and mill at Libby. These researchers observed increased prevalence in pleural changes, including pleural calcification, pleural thickening and profusion of small opacities among exposed workers. Rohs et al. (2007) studied the prevalence of pleural changes in the lungs of workers exposed to LA while working at a facility in Marysville, Ohio expanding Libby vermiculite for use as an inert carrier for lawn care products. Rohs et al. (2007) observed an increased incidence of pleural plaques, diffuse pleural thickening and interstitial changes (irregular opacities) in exposed workers. In addition, studies by Peipins et al. (2003), Muravov et al. (2005), and Whitehouse (2004) also observed increased incidence in pleural abnormalities of not only workers, but also household contacts of former employees of the Libby mine and residents of Libby, MT environmentally exposed to LA. These findings support the conclusion that exposure to LA can induce pleural abnormalities.

#### 6.4.2 Cancer Effects

Many epidemiological studies have reported increased mortality from cancer in asbestos workers, especially from lung cancer and mesothelioma. Based on these findings, and supported by extensive carcinogenicity data from animal studies, EPA has classified asbestos as a known human carcinogen (EPA 1993b).

#### 6.4.2.1 Lung Cancer

Exposure to asbestos is associated with increased risk of developing all major histological types of lung carcinoma (adenocarcinoma, squamous cell carcinoma, and oat-cell carcinoma) (ATSDR 2001). The latency period for lung cancer generally ranges from about 10 to 40 years (ATSDR 2001). Early stages are generally asymptomatic, but as the disease develops, patients may experience coughing, shortness of breath, fatigue, and chest pain. Most lung cancer cases result in death. The risk of developing lung cancer from asbestos exposure is substantially higher in smokers than in non-smokers (Selikoff et al. 1968, Doll and Peto 1985, ATSDR 2001b, National Toxicology Program [NTP] 2005).

#### 6.4.2.2 Mesothelioma

Mesothelioma is a tumor of the thin membrane that covers and protects the internal organs of the body including the lungs and chest cavity (pleura), and the abdominal cavity (peritoneum). Exposure to asbestos is associated with increased risk of developing mesothelioma (ATSDR 2001). The latency period for mesothelioma is typically around 20-40 years (Lanphear and Buncher 1992, ATSDR 2001b, Mossman et

al. 1996, Weill et al. 2004). By the time symptoms appear, the disease is most often rapidly fatal (British Thoracic Society 2001).

#### 6.4.2.3 Other Cancers

#### Gastrointestinal Cancer

A number of studies suggest asbestos exposure may increase risk of cancer at various gastrointestinal sites (EPA 1986). The National Academy of Science [NAS] (2006) reviewed evidence regarding the role of asbestos in gastrointestinal cancers primarily following occupational exposures (these are assumed to be primarily by the inhalation route). NAS concluded that data are "suggestive but insufficient" to establish that asbestos exposure causes stomach or colorectal cancer. Data on esophageal cancer are mixed and were regarded as "inadequate to infer the presence or absence of a causal relationship to asbestos exposure".

Data on risks of gastrointestinal cancer following ingestion-only exposure are more limited. Some researchers (e.g., Conforti et al. 1981, Kjaerheim et al. 2005) have reported a significant correlation between oral exposure to asbestos in drinking water and the risk of gastrointestinal cancer. However, WHO (1996) concluded that data are not adequate to support the hypothesis that an increased cancer risk is associated with the ingestion of asbestos in drinking water.

#### Laryngeal and Pharyngeal Cancer

NAS (2006) reviewed available data on the relationship between asbestos exposure and laryngeal cancer and concluded that the data were "sufficient to infer a causal relationship between asbestos and laryngeal cancer." NAS (2006) concluded that data are "suggestive but not sufficient to infer a causal relationship between asbestos exposure and pharyngeal cancer."

#### Renal Cancer

Excess deaths from kidney cancer among persons with known exposure to asbestos have been reported by a number of researchers (e.g., Selikoff et al. 1979, Enterline et al. 1987, Puntoni et al. 1979). A review by Smith et al. (1989) evaluated these studies and concluded that asbestos should be regarded as a probable cause of human kidney cancer.

#### 6.4.2.4 Observations of Asbestos-Related Cancer Cases in Workers in Libby

Amandus and Wheeler (1987), Amandus et al. (1987), McDonald et al. (1986a, 2004), and Sullivan (2007) studied the cause of death in workers exposed to LA while working at the vermiculite mine and mill at Libby. All of these groups of researchers reported an increased incidence of lung cancer and mesothelioma in exposed workers, strongly supporting the conclusion that LA can cause increased risk of respiratory cancer when inhaled.



## 6.5 Quantification of Exposure and Risk

## 6.5.1 Basic Equations

#### 6.5.1.1 Non-Cancer Risk

The risk of a non-cancer effect from inhalation exposure to asbestos is usually described in terms of a hazard quotient (HQ), which is defined as the ratio of the cumulative exposure level (s/cc-yrs) attributable to the site divided by an exposure level (the reference concentration, or RfC) that is believed to be without significant risk of adverse non-cancer effects:

$$HQ = CE / RfC$$

where:

CE = Cumulative exposure (PCME s/cc-yrs) RfC = Reference concentration (PCME s/cc-yrs)

At present, the EPA is working to develop an RfC for inhalation exposure to LA, but this value is still under development and is not yet available for use in estimation of HQ values. Therefore, no quantitative evaluation of non-cancer risk is included in this risk assessment. However, as discussed above in Section 6.3.1, studies in Libby reveal that the incidence of asbestos-related non-cancer effects, including pleural calcification, pleural thickening and opacities, are increased in workers and residents (Armstrong et al. 1988, McDonald et al. 1986, Amandus et al. 1987b, Peipins et al. 2003, Muravov et al. 2005, Whitehouse 2004). These findings emphasize that, despite the inability to provide a quantitative HQ calculation at present, occurrence of non-cancer effects are a significant human health concern in the community.

#### 6.5.1.2 Cancer Risk

Excess lifetime risk of cancer (lung cancer plus mesothelioma) from exposure to asbestos in air is related to the amount of asbestos inhaled and the age when exposure occurs. The basic equation is (EPA 2008):

$$Risk = EPC \cdot TWF \cdot IUR_{a,d}$$

where:

Risk = Lifetime excess risk of dying from cancer (lung cancer or mesothelioma) as a consequence of the site-related asbestos exposure

EPC = Exposure point concentration of asbestos in air (PCM s/cc)

TWF = Time weighting factor

 $IUR_{a,d}$  = Inhalation unit risk (PCM s/cc)-1 for an exposure that begins at age "a" and lasts for duration "d" years



The level of cancer risk that is of concern is a matter of personal, community, and regulatory judgment. In general, the EPA considers excess cancer risks that are below about 1E-06 to be so small as to be negligible, and risks above 1E-04 to be sufficiently large that some sort of remediation is desirable. Excess cancer risks that range between 1E-04 and 1E-06 are generally considered to be acceptable (EPA 1991b), although this is evaluated on a case by case basis, and EPA may determine that risks lower than 1E-04 are not sufficiently protective and warrant remedial action. Note that risk management decisions generally consider the sum of all the risks contributed by differing exposure scenarios into account, rather than simply evaluating each one independently.

#### 6.5.2 Data Sources

#### 6.5.2.1 Exposure Point Concentration (EPC)

The value of EPC is based on measurements of asbestos concentration levels in air (expressed as PCM or PCME s/cc) at the location of concern and for the exposure scenario of concern. Ideally, the EPC would be the true average concentration value<sup>1</sup>, averaged across the exposure duration "d". However, the true average concentration can only be approximated from a finite set of measurements, and the sample mean might be either higher or lower than the true mean. In order to minimize the chances of underestimating the true level of exposure and risk, EPA generally recommends that risk calculations be based on the 95% upper confidence limit (95UCL) of the sample mean (EPA 1992), and has developed a software application (ProUCL) to assist with the calculation of UCL values (EPA 2007). However, the equations and functions in ProUCL were not designed to work well for asbestos data sets, and application of ProUCL to asbestos data sets is not recommended. EPA is presently working to develop a new software application that will be appropriate for use with asbestos data sets, but the application is not yet available for use. In the interim, because the 95UCL cannot yet be calculated with confidence, risk calculations in the assessment will be based both on the sample mean and the maximum value. The risk estimate based on the sample mean is the best estimate of risk, and the value based on the maximum concentration is considered to be an upper bound.

## 6.5.2.2 Time Weighting Factor (TWF)

The value of TWF ranges from zero to one, and describes the average fraction of full time that exposure occurs in the time interval being evaluated. The general equation is (EPA 2008):

TWF =  $ET/24 \cdot EF/365$ 

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<sup>&</sup>lt;sup>1</sup> For analytes other than asbestos, EPA suggests that, when computing the mean of a set of samples, "non-detects" (i.e., samples with concentrations below the detection limit of the analytical instrument) be evaluated by assigning a surrogate value of ½ the detection limit (EPA 1989). By analogy, it is sometimes supposed that "non-detects" for asbestos (i.e., samples where the observed count is zero) should be evaluated by assigning a value equal to ½ the analytical sensitivity. However, this is not correct, and use of ½ the sensitivity as a surrogate for samples with a count of zero may lead to a substantial overestimate of the true mean of a group of samples. Rather, the mean of a set of microscopy sample results is computed by treating "non-detects" as zero.

where:

ET = Average exposure time (hrs/day) on days when exposure is occurring
EF = Average exposure frequency (days/year) in years when exposure is occurring

For example, if a person were exposed to asbestos 10 hours per day for 200 days per year, the value of TWF would be:

TWF = 
$$10/24 \cdot 200/365 = 0.228$$

Not all individuals within a group will have equal values for ET and EF. To account for this variability in exposure between different individuals, EPA focuses on individuals who have central tendency exposures (CTE) and on those who have reasonable maximum exposures (RME).

Data on ET (hours/day) and EF (days/year) were obtained by questionnaire for individuals who are currently exposed at OU1, including 18 volunteers at the Search and Rescue facility, 8 fishing guides, and one City maintenance worker. The detailed results of the survey are provided in Appendix I, and summary statistics for rescue volunteers (N = 18) and fishing guides (N = 8) are presented in Table 6-1. Because a response was obtained for only one City maintenance worker, and because the duties and exposure parameters of a maintenance worker are likely to change if the site is converted into a public park or a commercial building development, exposure parameters for this worker were based on professional judgment, as were parameters for current and future recreational visitors. These judgment-based parameters are shown in Table 6-2.

#### 6.5.2.3 Inhalation Unit Risk (IURa,d)

Values of IURa,d for a wide range of values for "a" (age at first exposure) and "d" (exposure duration) are given in EPA (2008). This document also gives an equation for computing IURa,d for any combination of "a" and "d" that are not included in EPA (2008). Values of IUR for the exposure scenarios of concern in this risk assessment are shown in Table 6-1 and Table 6-2.

## 6.5.3 Evaluation of Risks from Breathing Ambient Outdoor Air 6.5.3.1 Concentration Values in Outdoor Ambient Air

All people who visit or work at OU1 will be exposed by breathing outdoor ambient air (outdoor air that is not impacted by personal activities that disturb LA in outdoor soil). Although an outdoor ambient air monitoring program has not been performed specifically within the boundary of OU1, EPA has performed an extensive study of outdoor ambient air in Libby, using 14 different monitoring stations distributed throughout the community. The results of this study are presented in EPA (2009), and the concentration values are summarized in Table 6-3. Because OU1 is located in



the North section of Libby (see EPA 2009, Figure 2-1), the data for this area are considered to be appropriate for use at OU1:

EPC(mean) = 7.0E-06 PCME s/ccEPC(max) = 1.1E-04 PCME s/cc

#### 6.5.3.2 Exposure and Risk Calculations

Table 6-4 presents excess cancer risk estimates for people exposed to outdoor ambient air while present in OU1. As indicated, based on the best estimate of the mean concentration, estimated cancer risk levels range from 4E-10 to 3E-08, while upper bound estimates based on the maximum detected concentration range from 6E-09 to 4E-07. All of these values are well below EPA's risk range of 1E-04 to 1E-06, indicating that inhalation exposure to outdoor ambient air is not of significant concern for workers or visitors in OU1.

## 6.5.4 Evaluation of Risks from Indoor Exposure

#### 6.5.4.1 Concentration Values in Indoor Air

The only building that presently exists at OU1 that is regularly occupied by humans is the Search and Rescue building. As discussed in Section 2.1.11.3 and Section 4.1, indoor air personal air samples were collected at this building to evaluate three exposure scenarios:

- Active behaviors in the garage area
- Active behaviors in the meeting room area
- Passive behaviors in the meeting room area.

Table 6-5 summarizes the results, stratified by activity level.

#### 6.5.4.2 Exposure and Risk Calculations

Table 6-6 presents excess cancer risk estimates for people exposed to indoor air at the search and rescue building. As indicated, based on the best estimate of the mean, estimated cancer risk levels range from 8E-07 (CTE) to 1E-05 (RME). Based on the maximum detected concentrations, estimated cancer risk levels range from 4E-06 (CTE) to 9E-05 (RME). In both cases, most of the risk is associated with active behaviors, with relatively little coming from passive indoor activities.

These risk estimates are all within or below EPA's risk range, indicating that indoor exposures at the search and rescue building, taken alone, are of relatively low concern. However, as noted earlier, the same individual may be exposed both inside and outside the building in OU1, and also in other parts of Libby, so the risks from inside the building must be considered along with other exposures that contribute to the total (cumulative) risk to an individual.



## 6.5.5 Evaluation of Risks from Disturbing Outdoor Soil

#### 6.5.5.1 Air Concentrations Under Current Site Conditions

Measuring the concentration of asbestos in air in association with a specific activity that disturbs soil is referred to as activity-based sampling (ABS). Only one data set is available on the concentration of LA in ABS air samples near disturbed soils in OU1. As discussed in Section 2.1.11.4 and Section 4.3.2, this data set consists of 8 personal air samples collected by an individual who was mowing ("brush hogging") in Area 1 to prepare for an inspection of soil for visible vermiculite contamination. The ABS data from this event are summarized in Table 6-7. Although limited, these data are used here as the basis for estimation of human exposure from soil disturbances in OU1.

Because the ABS data from OU1 are limited, EPA considered using a more extensive ABS data set that has been collected at residential properties in OU4. However, no clear relationship has been established between ABS air values and the levels of LA in the soil, so reliable extrapolation of data from OU4 to OU1 is not possible. Consequently, it is unknown whether ABS data from OU1 would likely be similar to, higher than, or lower than the values observed in studies in OU4. Based on this, the data from OU4 were not used in this risk assessment.

#### 6.5.5.2 Exposure and Risk Calculations

Table 6-8 presents excess cancer risk estimates for people exposed to air in the vicinity of active soil disturbances in OU1. As indicated, based on the best estimate of the mean concentration, estimated cancer risk levels range from 1E-06 to 1E-04. Based on the maximum detected concentration, estimated cancer risk levels range from 6E-06 to 8E-04. These values are within and above EPA's risk range of 1E-06 to 1E-04, indicating that exposures via soil disturbance activities may be of concern for some receptors.

It is important to recognize that the OU1 ABS data have a number of potential limitations that limit confidence in the exposure and risk calculations presented above. Specifically, the data may tend to underestimate exposure and risk because:

- Most of the ground was wetted before mowing to suppress dust releases. Consequently, the amount of LA released may have been lower than if the disturbance had occurred when the ground was dry.
- Based on visual inspection, the levels of vermiculite in the area mowed are not as high as at some other locations in OU1. Consequently, similar soil disturbances in other areas may tend to release higher levels of LA.
- The number of samples collected (N = 8) may not be large enough to capture the full range of variability in airborne releases during mowing or other soil



disturbance activities, potentially leading to an underestimate of the mean air concentration that a worker might be exposed to.

Because of these limitations, the risk estimates presented in Table 6-8 should be considered uncertain, and actual risks may be higher.

#### 6.5.5.3 Consideration of Future Site Conditions

Even if it were possible to characterize cancer risks to people from exposures to OU1 soil under current site conditions, EPA is also concerned about potential future risks from soil disturbances at OU1. This is because several lines of information suggest that the subsurface soils at OU1 may contain substantial quantities of residual vermiculite that were released when the Export Plant was operating on the OU. This includes the following:

- Former workers at the Export Plant report that vermiculite was present in fill material used to level the area of the OU.
- Cleanup activities completed to date at OU1 have identified substantial levels of buried vermiculite at some locations, including the north face of the OU along the Kootenai River and along the berms to Highway 37 near the eastern end of the OU (CDM 2007b). Vermiculite in these areas has been observed as layers; it is suspected these layers are the result of material that was stockpiled during the operation of the export plant being used to fill in low lying areas of the OU.
- Installation of a water pipeline in OU1 by the City resulted in buried vermiculite being brought to the surface. During this excavation, vermiculite was observed at depths ranging from 10 to 36 inches below ground surface. Samples collected of the material indicated LA concentrations in the vermiculite were as high as 3% (CDM 2007b).
- Installation of a new phone line across OU1 by a utility company also resulted in buried vermiculite being brought to the surface. During this excavation, vermiculite was observed at a depth of 24 inches below ground surface (CDM 2007b).

This information indicates that buried vermiculite at OU1 could serve as a potential source of release and re-contamination of surface soils with LA under circumstances in which subsurface soils might become exposed. This could result from natural weathering and erosion at the OU, children or workers digging in the dirt, as well as a range of potential future construction activities that involve soil excavation or earthwork.

## 6.6 Uncertainties

There are a number of uncertainties that limit confidence in the estimated risks of cancer in people who may visit or work at OU1. The principal sources of this uncertainty are discussed below.



## 6.6.1 Uncertainty in LA Concentrations in Inhaled Air

Concentrations of LA in air are inherently variable, so estimates of mean exposure concentrations are subject to uncertainty arising from random variation between individual samples. This problem is especially marked for outdoor ABS samples, where very wide variability (3 -4 orders of magnitude) may be observed within and between data sets. This high variability means that it is usually necessary to collect a large number of samples to ensure that the data are representative. However, as noted above, at this OU, only 8 ABS values are available, and these values may not be representative of the true long term average exposure concentration for soil disturbances in the OU. Consequently, the mean is quite uncertain, and may be low.

This uncertainty is further compounded by the effect of analytical measurement error. That is, for each air sample collected, the measured concentration value is a random variable that is characterized by the Poisson distribution:

Cobserved ~ POISSON(Ctrue · Volume analyzed) / Volume Analyzed

As a consequence, the variability (and hence uncertainty) in the measured concentration values is greater than the variability due to sampling variation alone. Consequently, risks calculated based on the mean may be either higher or lower than the true risk, but the magnitude of the potential error cannot be estimated at present.

## 6.6.2 Lack of an Approved Non-Cancer RfC

As noted above, EPA has not yet developed national guidance for evaluating the risk of non-cancer effects from inhalation exposure to asbestos. For most chemicals that cause both cancer and non-cancer effects, it is usually true that unacceptable risks from cancer occur at lower environmental exposure levels than unacceptable risks of non-cancer effects. In this case, if action is taken to protect humans from unacceptable cancer risk, concern over non-cancer risk is generally low. Consequently, in this situation, absence of a reliable RfC might have little effect on risk management decision-making. However, this may not be the case for LA. Studies of former workers and area residents (Armstrong et al. 1988, McDonald et al. 1986a, Amandus et al. 1987, Peipins et al. 2003, Muravov et al. 2005, Whitehouse 2004) provide strong evidence that exposure to LA results in an increased incidence of non-cancer adverse effects, and that these effects occur in some individuals who appear to have had only low exposure. Thus, it should not be presumed that cancer risk is the "risk driver" at Libby OU1 or other parts of the Libby Site.

## 6.6.3 Uncertainty in the Cancer Exposure-Response Relationship

Available data from studies in both animals and humans suggest that the risk of cancer from inhalation exposure to asbestos may depend in part on the type of asbestos (chrysotile vs. amphibole) and on the dimensions (length and width) of the inhaled fibers. Evaluations performed to date suggest that amphibole asbestos is

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somewhat more potent than chrysotile (e.g., Hodgson and Darnton 2000, Berman and Crump 2008a, 2008b), although quantification of the difference remains difficult. Because the current EPA method for estimating cancer risk utilizes data from both chrysotile studies and amphibole studies and does not differentiate between the mineral forms, the potency estimates based on the current EPA method may be somewhat low for use at a site such as OU1 where exposure is to amphibole asbestos only. If so, risk estimates based on this method may tend to be somewhat low at OU1.

It is also important to note that the current EPA method for estimating cancer risk is based on the best estimate of the cancer potency factors for lung cancer and mesothelioma, and that the true value of the potency factors might be up to 10-times higher or lower than the best estimates (EPA 1986). Consequently, true risks might be up to 10 times higher or lower than the values reported here.

### 6.6.4 Uncertainty in Human Exposure Patterns

Risk from asbestos is strongly dependent not only on the level of exposure, but also on the frequency of exposure and on the age when exposure begins and ends. Reliable data on the human exposure parameters are available for two of the populations evaluated (rescue volunteers and fishing guides), but site-specific data are not presently available for other receptor groups, including recreational visitors, maintenance workers, commercial workers, or construction workers. The exposure parameters selected for use in the calculation of risks for these populations were selected using professional judgment, with the intention of selecting values that are more likely to be high than low. However, true values are uncertain, and a survey of current or future park visitors and workers would be needed to derive more accurate and reliable values.

## 6.6.5 Uncertainty from Uncharacterized Waste Material

One of the main concerns at OU1 is the presence of residual vermiculite in subsurface soil. Although current data (reviewed above) are sufficient to indicate that buried vermiculite is present, data are not sufficient to identify the locations, depths, and concentration levels that are present. Because buried vermiculite might be present at nearly any location, a very extensive sampling program would be needed to fully characterize the spatial (lateral and vertical) distribution of vermiculite and LA in subsurface soils at OU1.

The occurrence of buried vermiculite and associated LA contamination is of concern because this could serve as a potential source of release and re-contamination of surface soils under any circumstance in which subsurface soils might become exposed. This could result from natural weathering and erosion at the site, children or workers digging in the dirt, as well as a range of potential future construction activities that involve soil excavation or earthwork. Thus, regardless of the



confidence in the estimated risks to humans based on current site conditions, substantial concern exists for potential future risks that could result from exposure to LA-contaminated vermiculite wastes that are presently buried.

## 6.7 Summary

Methods for quantification of cancer and non-cancer risk from inhalation exposure to asbestos are still under development. However, risk predictions that are based on the best methods and data that are currently available indicate the following:

- Estimated excess cancer risks from inhalation exposure to outdoor ambient air at OU1 are all well below EPA's risk range of 1E-04 to 1E-06. Based on this, exposure to outdoor ambient air in OU1 is unlikely to be of significant health concern to any human receptor.
- Estimated excess cancer risks to volunteers who work indoors at the David Thompson Search and Rescue facility range are below or within EPA's risk range. Based on this, exposure to indoor air, taken alone, is likely to be of low concern. However, volunteers in the building may be exposed to LA by other pathways, and so risk evaluations must consider the total risk.
- Estimated cancer risks from inhalation of LA caused by disturbance of soils at OU1 are difficult to quantify with confidence, but it seems likely that risks to individuals who repeatedly disturb soil in OU1 may approach or exceed EPA's risk range. Based on this, this pathway is considered to be of potential concern.
- Subsurface soils at OU1 contain buried vermiculite. In the future, if this buried vermiculite became exposed (e.g., because of soil erosion or soil excavation activities), excess cancer risks from soil disturbance might be substantially higher than under current conditions.
- Non-cancer risks from inhalation exposure to LA cannot be quantified at present, but it is anticipated that non-cancer risks may be of similar or possibly even greater concern than cancer risks.



# Section 7 Summary and Conclusions

## 7.1 Summary

## 7.1.1 Investigation Findings and Observations

OU1 was historically owned and used by Grace for stockpiling, staging, and distributing vermiculite and vermiculite concentrate to vermiculite processing areas and insulation distributors outside of Libby. As result of these operations, the site was contaminated with LA contained within the vermiculite and vermiculite concentrate. Because of the LA contamination present at the site it became necessary for EPA to conduct various investigation activities to determine the nature and extent of LA contamination at the site. Through these investigations it became evident that removal actions would be required to remove LA source material present at the site to reduce exposures to LA.

Removal actions at the site conducted between October 2002 and October 2003 removed all historical buildings from the site and all surface soil with LA concentrations greater than or equal to 1%. Subsequent post removal investigations conducted in 2007 have indicated LA continues to be present at the site in indoor air, indoor dust, outdoor air, and surface soil as indicated in the following table:

Summary of Post Removal LA Results Per Media Representing the Current Status of OU1				
Media	Total Number of Samples Collected	Total Number of Samples with LA	Percentage of Samples with LA Observed (%)	Range of LA Results
Indoor Air	22	18	81.8	ND to 0.0699 s/cc
Indoor Dust	9	2	22.2	ND to 75 s/cm <sup>2</sup>
Outdoor Ambient Air*	143	32	22.4	ND to 0.00016 s/cc
Outdoor Air Near Disturbed Soil	8	6	75.0	ND to 0.0715 s/cc
Soil (surface)**	73	16	21.7	ND to <1%

Notes: LA – Libby amphibole; OU1 – Operable Unit 1; % – percent; ND – non-detect; s/cc – structures per cubic centimeter; s/cm² – structures per square centimeter; < – less than; \* Data summarized from Summary of Outdoor Ambient Air Monitoring for Asbestos at the Libby Asbestos Site, Libby, Montana (October 2006 to June 2008) (EPA 2009); \*\* Based on PLM-VE results only

## 7.1.2 Risk Assessment Summary

Risk predictions, specific to OU1, that are based on the best methods and data that are currently available are summarized in the following table:



Summary of Post Removal Estimate Risk Levels for Media of Concern at OU1					
Media	Estimate of Mean Concentration	Estimate of Maximum Detected Concentration*			
Indoor Air	8E-07 (CTE) to 1E-05 (RME)	4E-06 (CTE) to 9E-05 (RME)			
Outdoor Ambient Air	4E-10 to 3E-08	6E-09 to 4E-07			
Outdoor Air Near Disturbed Soil	1E-06 to 1E-04	6E-06 to 8E-04			

Notes: CTE - central tendency exposure; RME - reasonable maximum exposure; \*shading represents risks that are above EPA's acceptable risk range

#### 7.2 Conclusions

Based on the information currently available and presented in this RI, the following conclusions have been drawn regarding OU1:

- Vermiculite and LA has been observed in surface soil at the site. Vermiculite and LA will continue to exist in surface soil at the site if no remedial actions are taken.
- Subsurface soils at OU1 contain vermiculite. Excess cancer risks from subsurface soil disturbance might be substantially higher than under current conditions if this buried vermiculite became exposed. Remedial actions are required to reduce or prevent exposures to these subsurface soils.
- Estimated excess cancer risks from inhalation exposure to outdoor ambient air at OU1 are all well below EPA's risk range of 1E-04 to 1E-06 and exposure to outdoor ambient air in OU1 is unlikely to be of significant health concern to any receptor.
- Estimated excess cancer risks to volunteers who work indoors at the David Thompson Search and Rescue facility range are below or within EPA's risk range. Exposure to indoor air, taken alone, is likely to be of low concern.
- It is likely that risks to individuals who repeatedly disturb soil in OU1 may approach or exceed EPA's risk range. Based on this, this pathway is considered to be of potential concern and requires remedial action to reduce or prevent exposures from disturbed soils.
- It is anticipated that non-cancer risks may be of similar or possibly even greater concern than cancer risks.

This RI will be followed by an FS. The FS will contain multiple preliminary remedial action objectives, including the following:

- 1) Mitigate the potential for inhalation exposures to asbestos fibers that would result in risks that exceed the target cancer risk range specified by EPA of 1E-06 to 1E-04
- 2) Control erosion of contaminated soil by wind and water from source locations to prevent the spread of contamination to unimpacted locations and media



3) Implement controls to prevent uses of the site that could pose unacceptable risks to human health or the environment or compromise the remedy

A preliminary list of Federal/state chemical- and location-specific applicable or relevant and appropriate requirements (ARARs) are provided in Table 7-1. ARARs represent the federal and state standards, requirements, criteria, or limitations that must be met by any Superfund remedial action.



# Section 8 References

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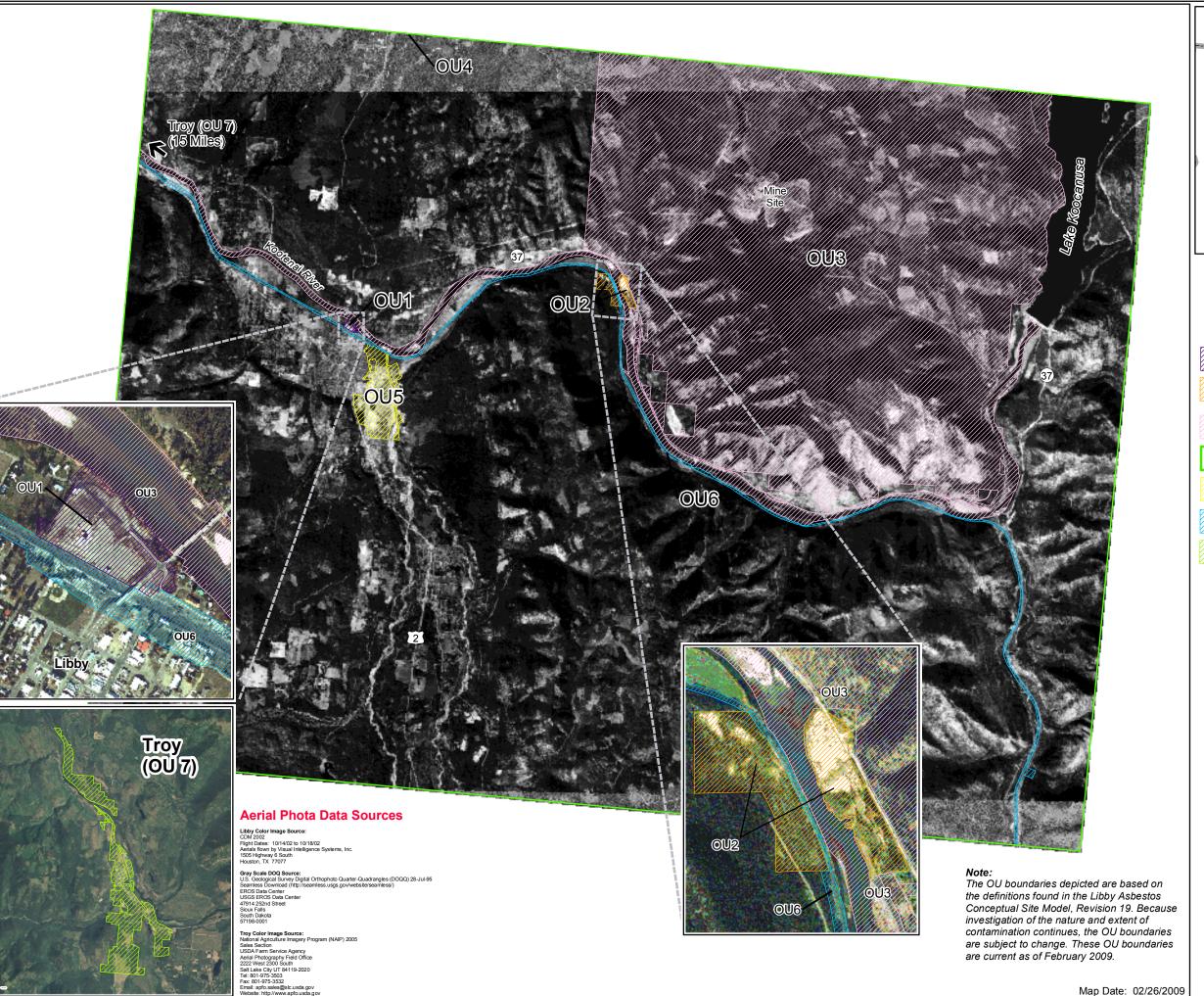


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# **Figures**





# Legend

OU1 - Former Export Plant

OU2 - Former Screening Plant, Flyway Property, Highway 37 right-of-way adjacent to the Screeing Plant, and the KDC Bluffs

OU3 - Mine site area, Kootenai River, Rainy Creek and Rainy Creek Road

OU4 - Residential, Commercial, Industrial Properties including Schools and Parks

OU5 - Former Stimson Lumber Mill

OU6 - BNSF Railyard, Tracks, and Right -of-way

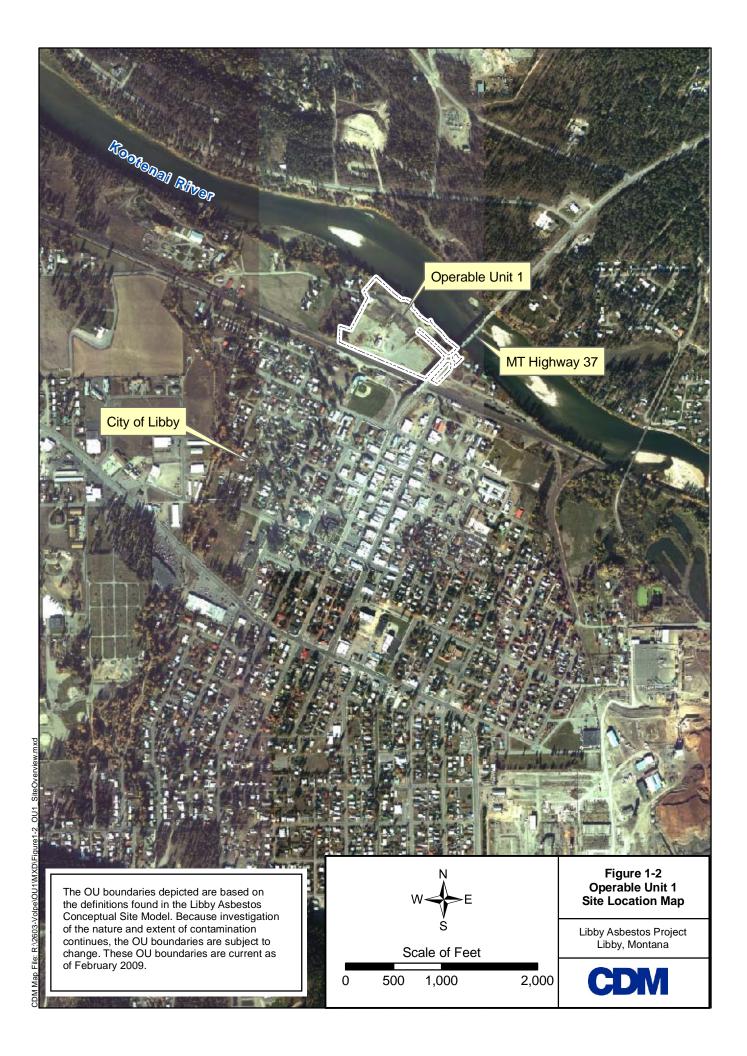
OU7 - Troy

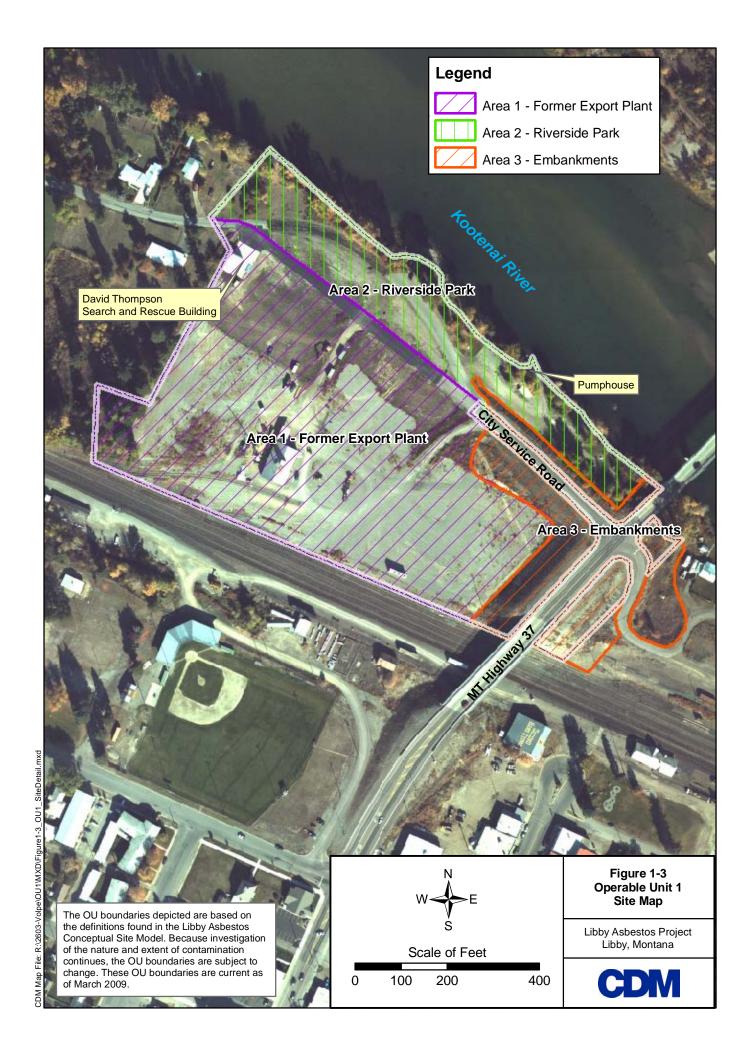


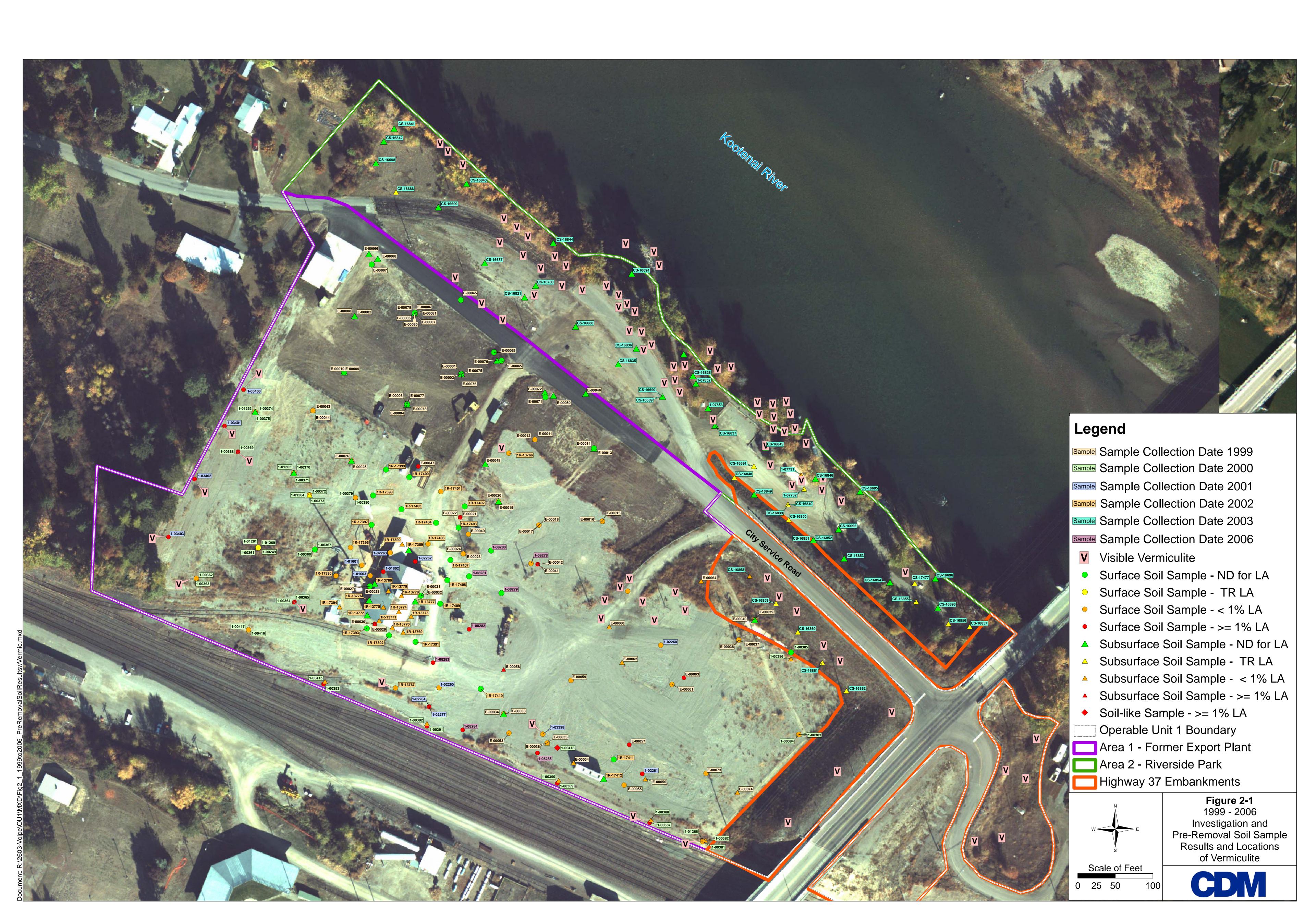
# Figure 1-1

Operable Unit (OU) Boundaries Libby Asbestos Site Libby, Montana









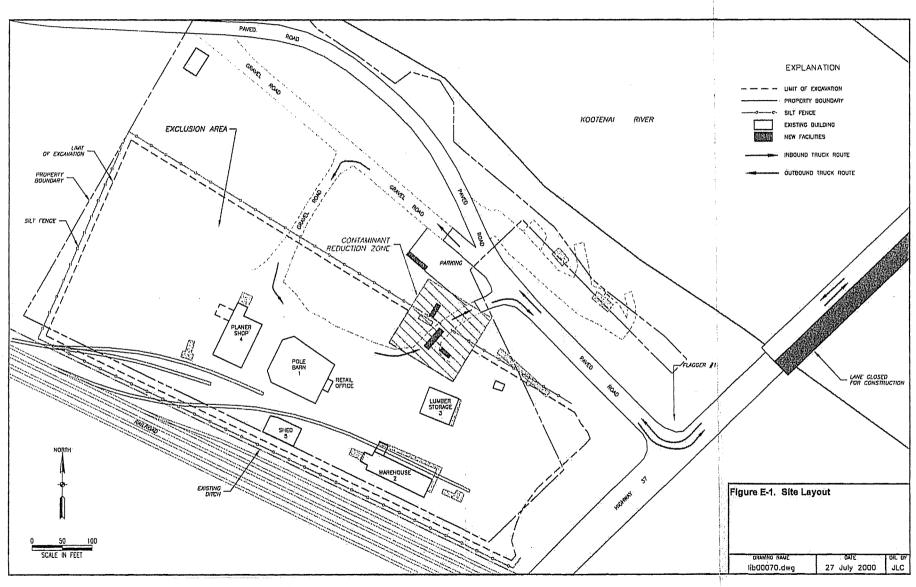
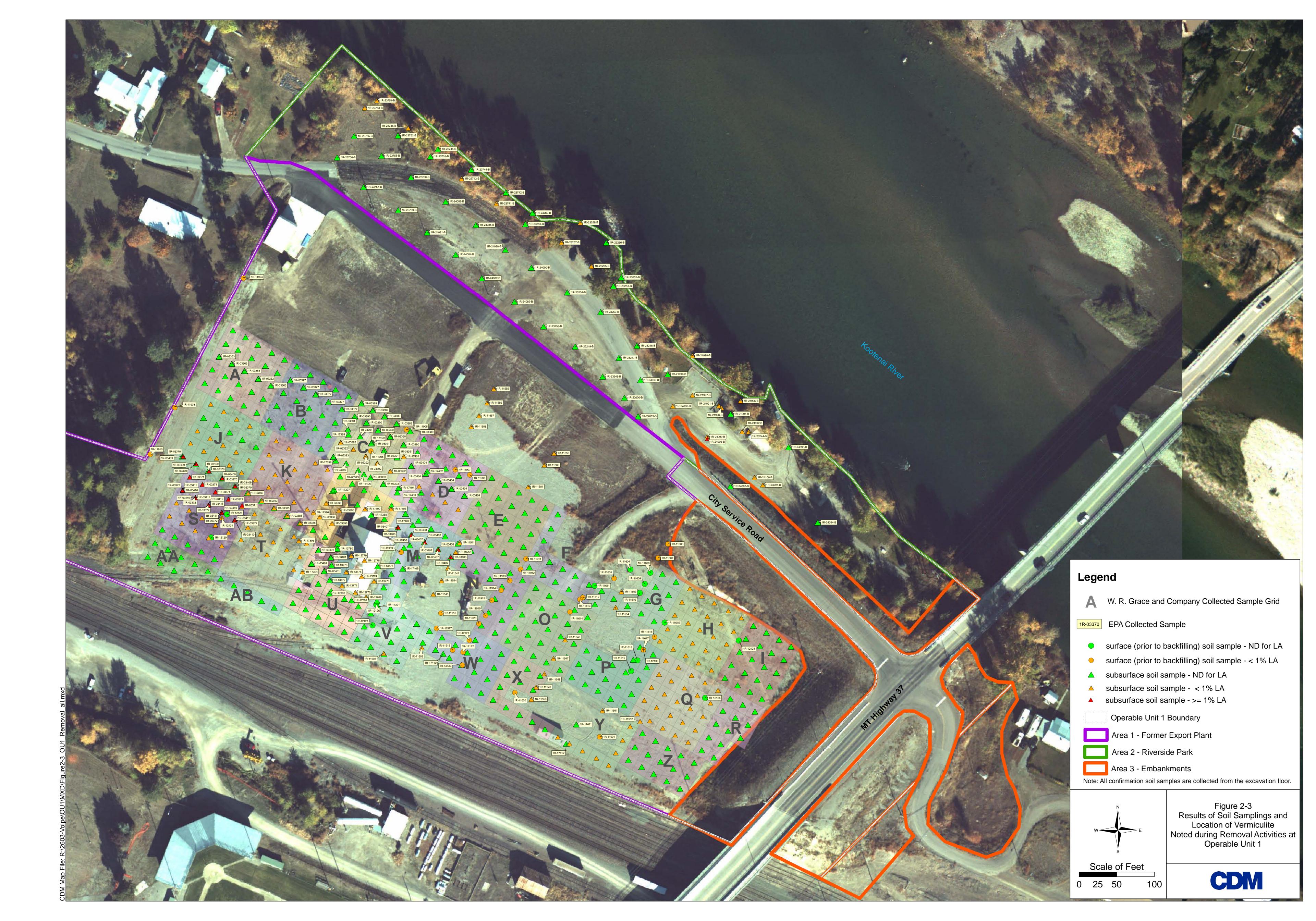


Figure 2-2. Area 1 Building Locations as of July 2000

Taken from the Approved Work Plan, Export Plant Removal Action, Libby, Montana, July 28, 2000. Prepared for W.R. Grace and Company by URS.



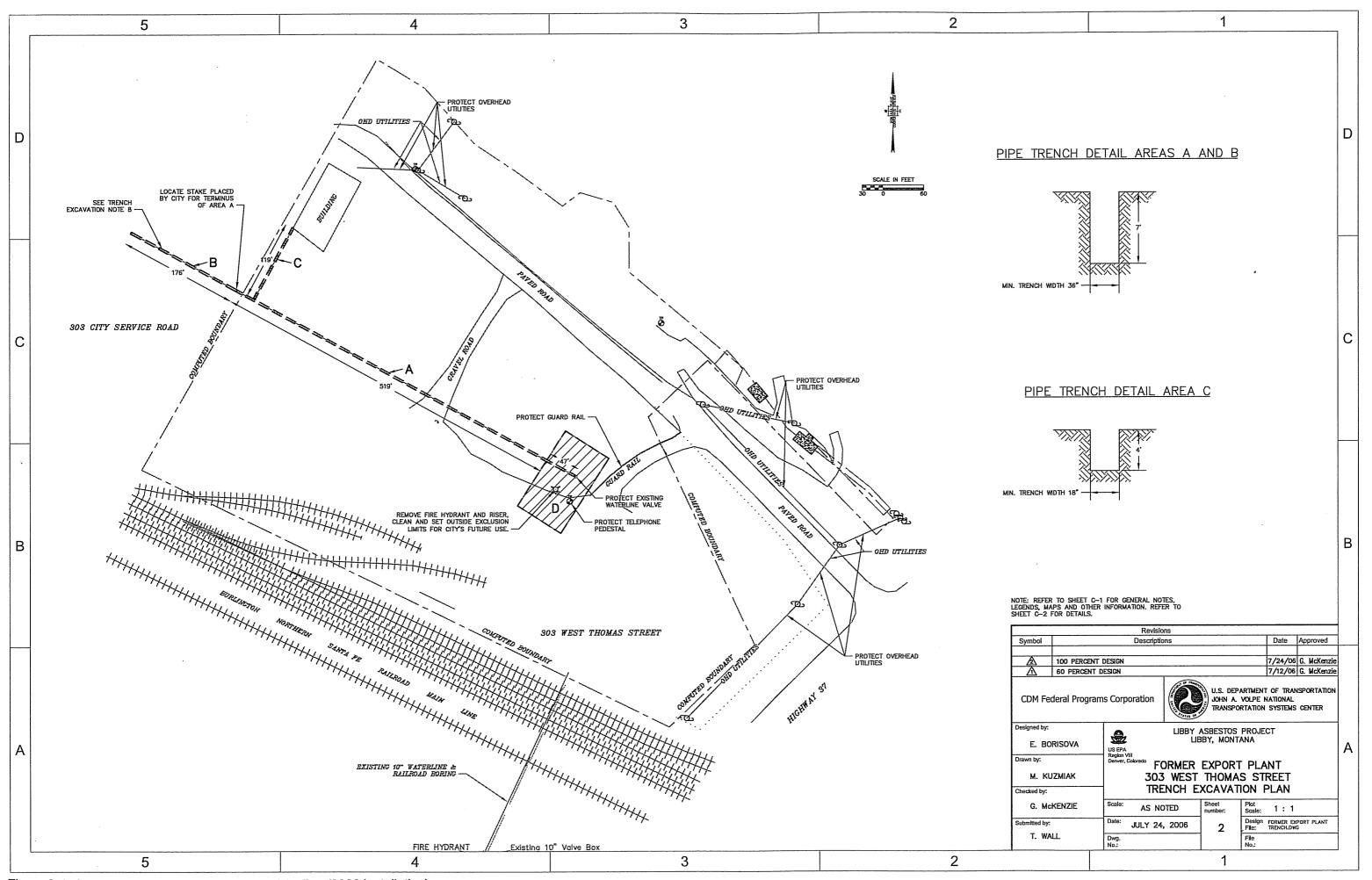
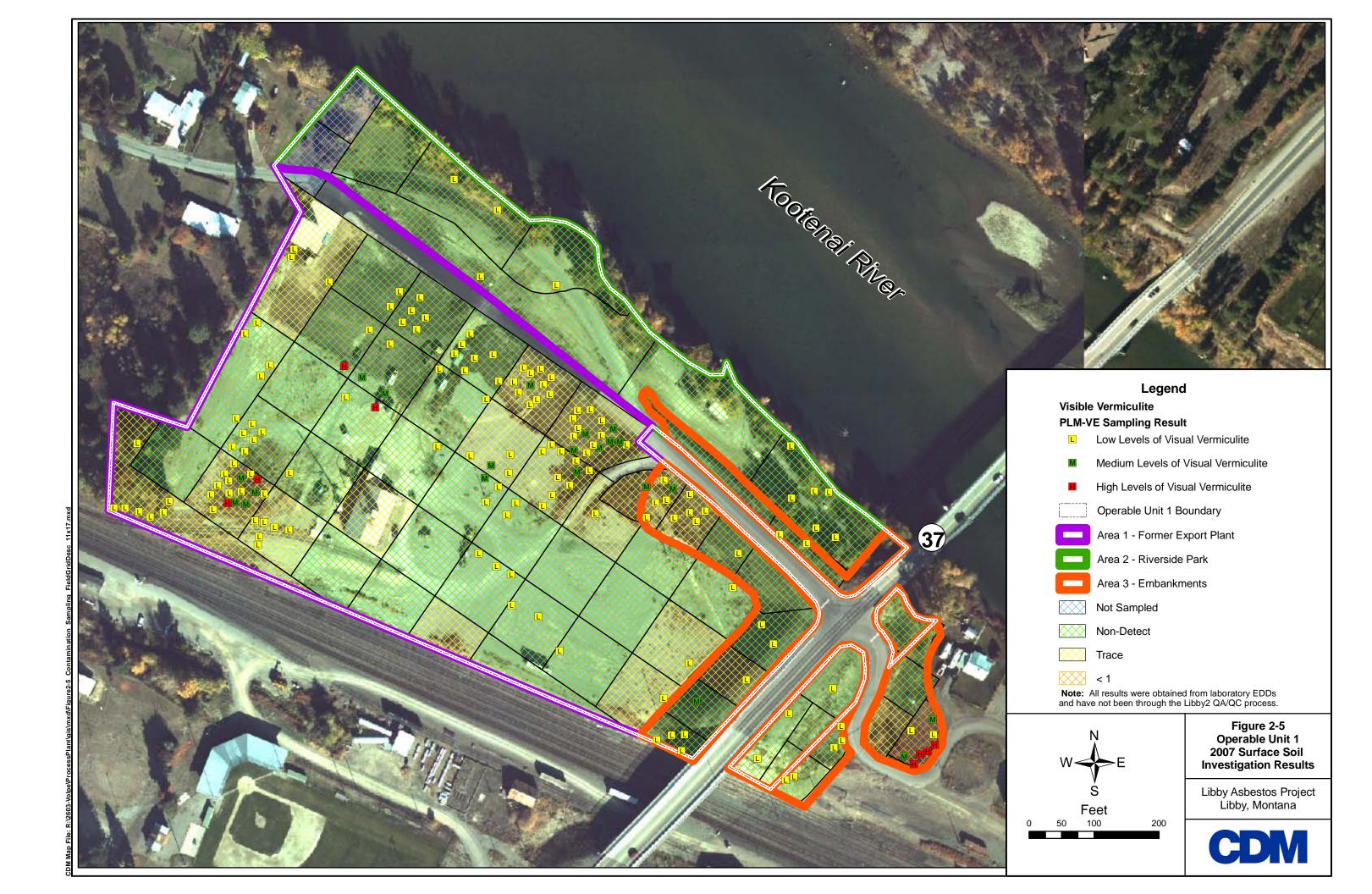
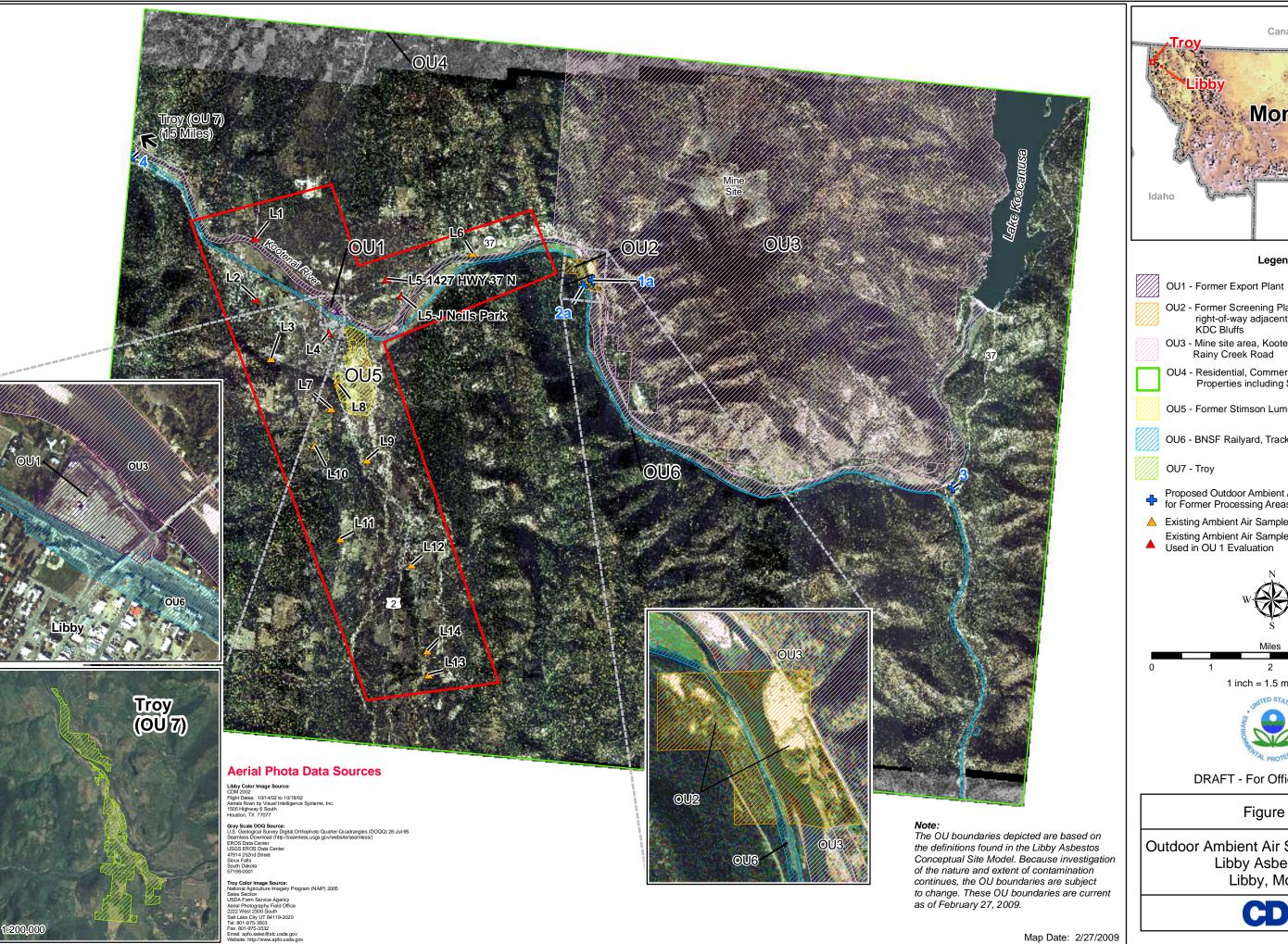
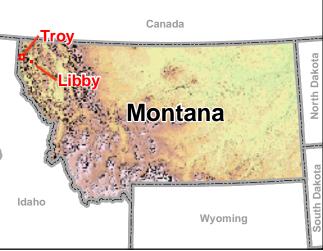


Figure 2-4. Location of the City of Libby Water Pipeline (2006 Installation)







# Legend

OU2 - Former Screening Plant, Flyway Property, Highway 37 right-of-way adjacent to the Screeing Plant, and the KDC Bluffs

OU3 - Mine site area, Kootenai River, Rainy Creek and Rainy Creek Road

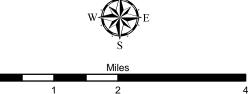
OU4 - Residential, Commercial, Industrial Properties including Schools and Parks

OU5 - Former Stimson Lumber Mill

OU6 - BNSF Railyard, Tracks, and Right -of-way

Proposed Outdoor Ambient Air Sample Locations for Former Processing Areas

▲ Existing Ambient Air Sample Locations Existing Ambient Air Sample Locations



1 inch = 1.5 miles



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# Figure 2-6

Outdoor Ambient Air Sampling Locations Libby Asbestos Site Libby, Montana



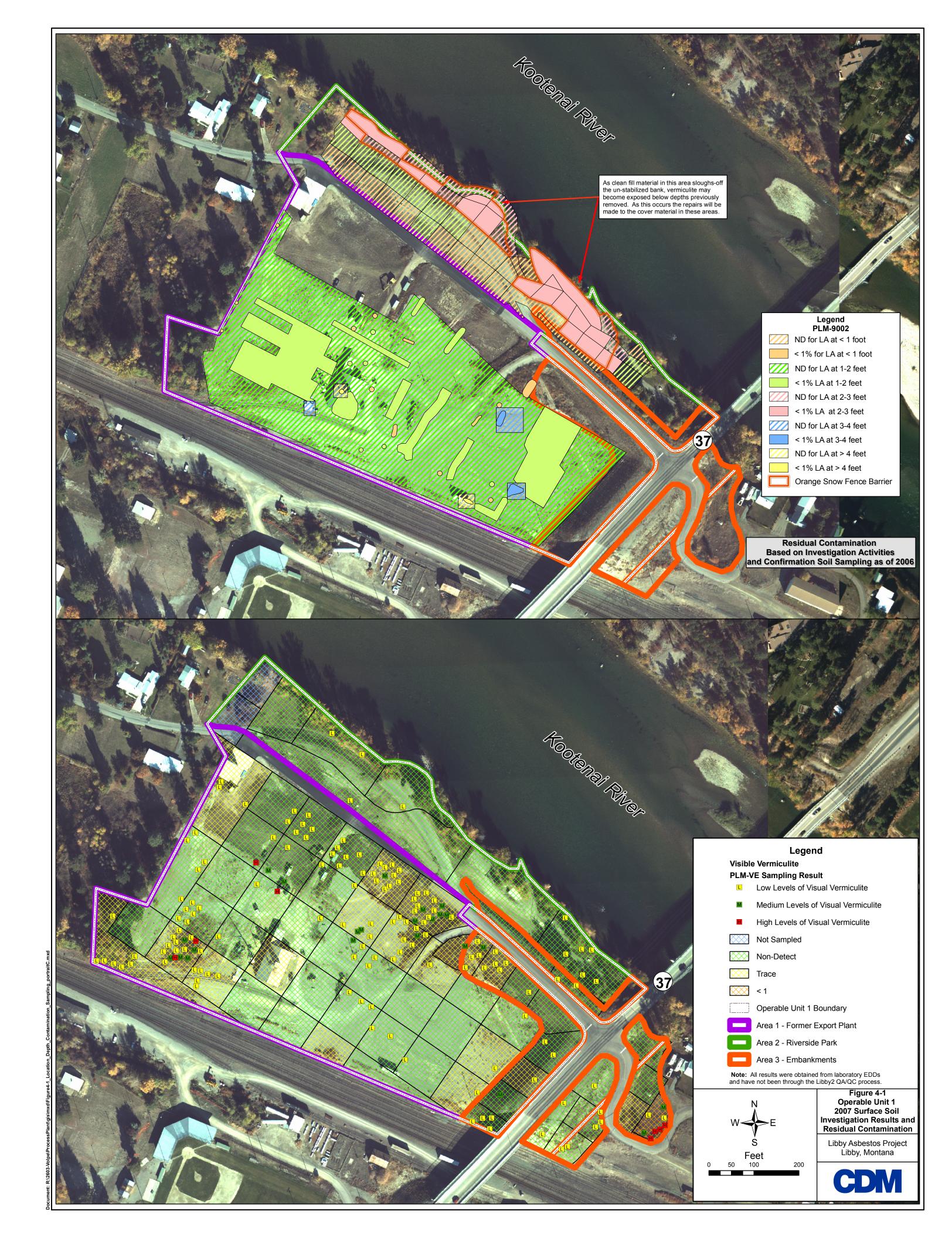
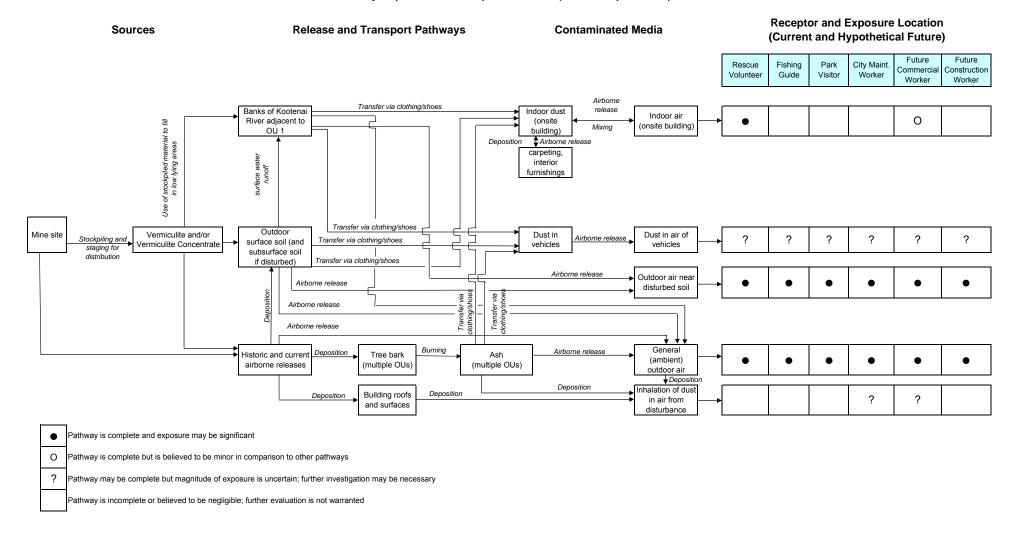


Figure 6-1. Conceptual Site Model for Inhalation Exposures to Asbestos
Libby Superfund Site -- Operable Unit 1 (Former Export Plant)



# **Tables**

Table 2-1. Area 1 Investigation Soil Sample Results – December 1999

									Тор	Bottom		Analytical R	esults	
Commis ID	Camaria Data	0-4	Donant ID	B4 m4min	Commis Comm	Location Description	Sample	Number of	Depth	Depth	Mathad	LA Dim	I A (0/)	C (0/)
Sample ID	Sample Date	Category	Parent ID	Matrix	Sample Group	(Sub Location)	Туре	Subsamples	(inches)	(inches)	Method	LA Bin	LA (%)	C (%)
E-00001-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002 PLM-9002	A	ND	ND ND
E-00002-B E-00003-B	12/12/1999 12/12/1999	Field Sample Field Sample		Surface soil Surface soil	Property Property	Soil Soil	Grab Grab		0	12	PLM-9002 PLM-9002	A A	ND ND	ND
E-00003-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	A	ND	ND
E-00004-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	A	ND	ND
E-00005-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002 PLM-9002	A	ND	ND
E-00007-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	A	ND	ND
E-00007-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	A	ND	ND
E-00008-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	A	ND	ND
E-00010-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	A	ND	ND
E-00010-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	/ 1	ND
E-00011-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	B2	< 1	ND
E-00012-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	A	ND	ND
E-00013-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	A	ND	ND
E-00014-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00015-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	B2	< 1	ND
E-00016-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002 PLM-9002	B2	< 1	ND
E-00017-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	C	2	ND
E-00018-B E-00019-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002 PLM-9002	B2	_ 1	ND
E-00019-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	A	ND	ND
E-00020-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	C	2	ND
E-00021-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	C	2	ND
E-00022-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00023-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	B2	< 1	ND
E-00024-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00025-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	A	ND	ND
E-00020-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	A	ND	ND
E-00027-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	B2	< 1	ND
E-00020-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	C	2	ND
E-00029-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	C	2	ND
E-00030-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	A	ND 2	- 1
E-00031-B	12/12/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	B2	< 1	ND
E-00032-B	12/12/1999	Field Duplicate	E-00001	Surface soil	Property	Soil	Grab		0	2	PLM-9002	A	ND	ND
E-00075-B	12/12/1999	Field Duplicate	E-00001	Surface soil	Property	Soil	Grab		2	12	PLM-9002	A	ND	ND
E-00077-B	12/12/1999	Field Duplicate	E-00003	Surface soil	Property	Soil	Grab		0	2	PLM-9002	A	ND	ND
E-00078-B	12/12/1999	Field Duplicate	E-00004	Surface soil	Property	Soil	Grab		2	12	PLM-9002	A	ND	ND
E-00079-B	12/12/1999	Field Duplicate	E-00005	Surface soil	Property	Soil	Grab		0	2	PLM-9002	A	ND	< 1
E-00080-B	12/12/1999	Field Duplicate	E-00006	Surface soil	Property	Soil	Grab		2	12	PLM-9002	A	ND	< 1
E-00081-B	12/12/1999	Field Duplicate	E-00007	Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	. t.S ≤ 1	ND .
E-00082-B	12/12/1999	Field Duplicate	E-00008	Surface soil	Property	Soil	Grab		2	12	PLM-9002	B2	< 1	ND
E-00033-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00034-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	A	ND .	ND
E-00035-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00036-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	B2	< 1	ND
E-00037-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00038-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	B2	< 1	ND
E-00039-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00040-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	A	ND .	ND
E-00041-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	С	3	ND
E-00042-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	С	5	ND
E-00043-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00044-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	B2	< 1	ND
E-00045-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	A	ND	ND
E-00046-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	A	ND	ND
E-00047-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	С	2	ND
E-00048-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	Α	ND	ND
E-00049-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00050-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	А	ND	ND
E-00053-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00054-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND

Table 2-1. Area 1 Investigation Soil Sample Results – December 1999

									Тор	Bottom	, and a	Analytical R	esults	
						Location Description	Sample	Number of	Depth	Depth				
Sample ID	Sample Date	Category	Parent ID	Matrix	Sample Group	(Sub Location)	Type	Subsamples	(inches)	(inches)	Method	LA Bin	LA (%)	C (%)
E-00055-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00056-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00057-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	С	2	ND
E-00058-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	С	2	ND
E-00059-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00060-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00061-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00062-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00063-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	С	3	ND
E-00064-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	B2	< 1	ND
E-00065-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	Α	ND	ND
E-00066-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	Α	ND	ND
E-00067-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	24	PLM-9002	Α	ND	ND
E-00068-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	24	PLM-9002	Α	ND	ND
E-00069-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	24	PLM-9002	Α	ND	ND
E-00070-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	24	PLM-9002	Α	ND	ND
E-00071-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	24	PLM-9002	Α	ND	ND
E-00072-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	24	PLM-9002	Α	ND	ND
E-00073-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	24	PLM-9002	B2	< 1	ND
E-00074-B	12/13/1999	Field Sample		Surface soil	Property	Soil	Grab		0	24	PLM-9002	B2	< 1	ND

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

B suffix in Sample ID = non-processed sample LA = Libby Amphibole

C = Chrysotile

ND = non-detect

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

% = percent

Table 2-2. Area 1 Investigation Soil Sample Results – March 2000

									Тор	Bottom		Analytical R	esults	
Sample ID	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Depth (inches)	Depth (inches)	Method	LA Bin	LA (%)	C (%)
1-00249	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	В	< 1	ND ND
1-00361	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-00362	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	В	< 1	ND
1-00363	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-00364	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	С	5	ND
1-00365	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	С	10	ND
1-00366	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	Α	ND	ND
1-00367	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-00368	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	С	5	ND
1-00369	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	С	2	ND
1-00370	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	В	< 1	ND
1-00371	3/10/2000	Field Sample	1	Surface soil	Property	Soil	Grab		2	12	PLM-9002	Α	ND	ND
1-00372	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	В	< 1	ND
1-00373	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-00374	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	В	< 1	ND
1-00375	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	Α	ND	ND
1-00379	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	В	< 1	ND
1-00380	3/10/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	С	2	ND
1-01261	3/10/2000	Field Duplicate	1-00249	Surface soil	Property	Soil	Grab		0	2	PLM-9002	В	< 1	ND
1-01262	3/10/2000	Field Duplicate	1-00371	Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-01263	3/10/2000	Field Duplicate	1-00375	Surface soil	Property	Soil	Grab		2	12	PLM-9002	Α	ND	ND
1-01264	3/10/2000	Field Duplicate	1-00373	Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-01269	3/10/2000	Field Duplicate	1-00361	Surface soil	Property	Soil	Grab		2	12	PLM-9002	С	1	ND
1-00381	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	В	< 1	ND
1-00382	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-00383	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	В	< 1	ND
1-00384	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-00385	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	Α	ND	ND
1-00386	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-00387	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	С	1	ND
1-00388	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-00389	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	С	1	ND
1-00390	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-00391	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	С	1	ND
1-00392	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-00393	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	С	1	ND
1-00415	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-00416	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		0	2	PLM-9002	В	< 1	ND
1-00417	3/11/2000	Field Sample		Surface soil	Property	Soil	Grab		2	12	PLM-9002	В	< 1	ND
1-00418	3/11/2000	Field Sample		Other	Property	LABELED "VERMICULITE	Grab				PLM-9002	С	2	ND
1-01266	3/11/2000	Field Duplicate	1-00382	Surface soil	Property	Soil	Grab		2	12	PLM-9002	С	1	ND

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

% = percent

Table 2-3. Area 1 Stationary Air Sample Results – April 2000

															Analy		(METHOD - IS	O 10312)											
								Lib	by Amphibole	(LA)							Chry	sotile (C)							Other Am	phibole (OA)			
					Excluded Structures Structures Detected Excluded Structures Structures Detected														Exc	luded Stru	ctures	Struc	tures Detecte	ed					
						Excluded Structures Structures Detected Aspect							Total	Aspect								Aspect						Total	Total
				Grid	Analytical	Ratio	Length	Diameter	Length	Length	Length	Total	Count	Ratio	Length	Diameter	Length	Length	Length	Total	Total	Ratio	Length	Diameter	Length	Length	Length	Concentration OA	Count
Sample ID	Sample Date	Sample Group	Volume (L)	Openings	Sensitivity	<5:1	<0.5 u	>0.5 u	0.5 to 5 u	5 to 10 u	>10 u	Concentration LA	LA	<5:1	<0.5 u	>0.5 u	0.5 to 5 u	5 to 10 u	>10 u	Concentration C	Count C	<5:1	<0.5 u	>0.5 u	0.5 to 5 u	5 to 10 u	>10 u		OA
1-00802	4/4/2000	Lumber Yard	2256	30	0.0006	0	0	0	0.0011	0.0011	0	0.0023	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-00809	4/5/2000	Lumber Yard	5040	70	0.0003	0	0	0	0.0001	0	0	0.0001	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-01308	4/9/2000	Lumber Yard	4344	70	0.0003															0	0								

Notes and Definitions:

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

C = Chrysotile

OA = Other Amphibole

N/A = not applicable

ISO 10312 = International Organization of Standards 10312 method

L = liters

s/cc = Structures per cubic centimeter

u = micron

< = less than

0.0002 - indicates concentrations above Average total LA concentration observed in OU4 2006-2008 ambient air sampling event was 0.00001 s/cc

Table 2-4. Area 1 Investigation Personal Air Sample Results – June 2000

																Analy		METHOD - ISC = s/cc)	10312)											
										Libby An	phiboles ( LA	.)						Chrys	otile (C)							Other Am	phiboles ( OA	1)		
						Excluded Structures Structures Detected Excluded Structures Structures Detected Excluded Structures Detected Structures Detect														7										
							Excluded Structures Structures Detected Excluded Structures Structures Detected Excluded Structures Detected Structures Detected Detected Excluded Structures Detected Detecte																							
					Grid	Analytical	Ratio	Length	Diameter	Length	Length	Length :	> Total Concentration	Total	Ratio	Length	Diameter	Length	Length	Length	<b>Total Concentration</b>	Total	Aspect Ratio	o Length <	Diameter	Length	Length	Length	<b>Total Concentratio</b>	on Total
Sample ID	Task	Sample Date	Sample Group	Volume (air=L)	Openings	Sensitivity	< 5:1	< 0.5 u	> 0.5u	0.5 to 5 u	5 to 10 u	10 u	LA	Count LA	< 5:1	< 0.5 u	> 0.5u	0.5 to 5 u	5 to 10 u	> 10 u	С	Count C	< 5:1	0.5 u	> 0.5u	0.5 to 5 u	5 to 10 u	> 10 u	OA	Count OA
1R-00039	sweep in the planer breakroom at	6/25/2000	Lumber Yard	417	40	0.1617	0	0	0.3235	0.3235	0	0	0.6470	4	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	millwork west																													
1R-00042	working in bag house - moving bags	6/25/2000	Lumber Yard	399	40	0.1690	0	0	1.0143	0.5071	0.5071	0.3381	2.3666	14	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0
	of insulation and sweep floor,							1					1																	[
	Millwork West												1																	1

Notes and Definitions:
The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.
LA = Libby Amphibole

LA = Libby Amphibole
C = Chrysotile
OA = Other Amphibole
ISO 10312 = International Organization of Standards 10312 method
L = liters
s/cc = Structures per cubic centimeter
u = micron
< = less than
> = greater than

Table 2-5. Area 1 Removal-related Soil Sample Results – October and November 2000

						Location Description	Sample	Number of	Тор	Bottom	A	nalytical R	esults**		
Sample ID	Sample Date	Category	Parent ID	Matrix	Sample Group	(Sub Location)	Sample Type	Subsamples	Depth (inches)*	Depth (inches)*	Method	LA Bin	LA (	(%)	C (%)
A-1.5	10/25/2000	W.R. Grace Field Sample	T GI CITE ID	Soil	***	Grid A-1.5	Composite	5	16	18	EPA/600/R-93/16	***		0.0	3 (70)
A-6.10	10/25/2000	W.R. Grace Field Sample		Soil	***	Grid A-6.10	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
A-11.15	10/25/2000	W.R. Grace Field Sample		Soil	***	Grid A-11.15	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
1R-03363	10/25/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid A-11.15	Composite	5	6	14	PLM-9002	А	ND		ND
A-16.20	10/25/2000	W.R. Grace Field Sample		Soil	***	Grid A-16.20	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
A-21.25	10/25/2000	W.R. Grace Field Sample		Soil	***	Grid A-21.25	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
B-1.5	10/31/2000	W.R. Grace Field Sample		Soil	***	Grid B-1.5	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
B-6.10	10/31/2000	W.R. Grace Field Sample		Soil	***	Grid B-6.10	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
1R-03377	10/31/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid B-6.10	Composite	5	6	14	PLM-9002	Α	ND		ND
B-11.15	10/31/2000	W.R. Grace Field Sample		Soil	***	Grid B-11.15	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
B-16.20	10/31/2000	W.R. Grace Field Sample		Soil	***	Grid B-16.20	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
B-21.25	10/31/2000	W.R. Grace Field Sample		Soil	***	Grid B-21.25	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
C-1.5	11/3/2000	W.R. Grace Field Sample		Soil	***	Grid C-1.5	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
1R-03389	11/3/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid C-1.5	Composite	5	18	22	PLM-9002	Α	ND		ND
C-6.10	11/3/2000	W.R. Grace Field Sample		Soil	***	Grid C-6.10	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
1R-03390	11/3/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid C-6.10	Composite	5	18	22	PLM-9002	Α	ND		ND
C-11.15	11/3/2000	W.R. Grace Field Sample		Soil	***	Grid C-11.15	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
1R-03391	11/3/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid C-11.15	Composite	5	18	22	PLM-9002	Α	ND		ND
C-16.20	11/3/2000	W.R. Grace Field Sample		Soil	***	Grid C-16.20	Composite	5	16	18	EPA/600/R-93/16	***		0.5	
1R-03392	11/3/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid C-16.20	Composite	5	18	22	PLM-9002	В	<	1	ND
C-21.25	11/3/2000	W.R. Grace Field Sample		Soil	***	Grid C-21.25	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
1R-03393	11/3/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid C-21.25	Composite	5	18	22	PLM-9002	Α	ND		ND
D-1.5	11/7/2000	W.R. Grace Field Sample		Soil	***	Grid D-1.5	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
D-6.10	11/7/2000	W.R. Grace Field Sample		Soil	***	Grid D-6.10	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
D-11.15	11/7/2000	W.R. Grace Field Sample		Soil	***	Grid D-11.15	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
1R-03404	11/7/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid D-11.15	Composite	5	8	12	PLM-9002	Α	ND		ND
D-16.20	11/7/2000	W.R. Grace Field Sample		Soil	***	Grid D-16.20	Composite	5	16	18	EPA/600/R-93/16	***	Trace		
D-21.25	11/7/2000	W.R. Grace Field Sample		Soil	***	Grid D-21.25	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
Grid E	12/4/2000	W.R. Grace Field Sample		Soil	***	Grid E	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
Grid F	12/4/2000	W.R. Grace Field Sample		Soil	***	Grid F	Composite	4	16	18	EPA/600/R-93/16	***		0.0	
Frid G	11/21/2000	W.R. Grace Field Sample		Soil	***	Grid G	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
Grid H	11/20/2000	W.R. Grace Field Sample		Soil	***	Grid H	Composite	5	16	18	EPA/600/R-93/16	***	Trace		
Grid I	11/20/2000	W.R. Grace Field Sample		Soil	***	Grid I	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
J-1.5	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid J-1.5	Composite	5	16	18	EPA/600/R-93/16	***		0.3	
J-6.10	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid J-6.10	Composite	5	16	18	EPA/600/R-93/16	***		0.0	
J-11.15	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid J-11.15	Composite	5	16	18	EPA/600/R-93/16	***	<	0.25	
J-16.20 J-21.25	10/28/2000 10/28/2000	W.R. Grace Field Sample W.R. Grace Field Sample		Soil Soil	***	Grid J-16.20 Grid J-21.25	Composite Composite	5 5	16	18 18	EPA/600/R-93/16	***		0.5	
				Soil	Dan este	Grid J-21.25 Grid J-21.25			16 12	24	EPA/600/R-93/16			1.0	
1R-03370	10/28/2000	Split of W.R. Grace Field Sample			Property		Composite	5			PLM-9002	С		2	ND
1R-03409	11/9/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid 2J-21.25	Composite	5	12	18	PLM-9002	Α	ND		ND
K-1.5	11/1/2000	W.R. Grace Field Sample		Soil	***	Grid K-1.5	Composite	5	16	18	EPA/600/R-93/116	***	Trace		1
K-6.10	11/1/2000	W.R. Grace Field Sample		Soil	***	Grid K-6.10	Composite	5	16	18	EPA/600/R-93/116	***	Trace		
	1	· · · · · · · · · · · · · · · · · · ·	+		***						1	***	Hace		
K-11.15	11/1/2000	W.R. Grace Field Sample		Soil		Grid K-11.15	Composite	5	16	18	EPA/600/R-93/116			8.0	
K-16.20	11/1/2000	W.R. Grace Field Sample		Soil	***	Grid K-16.20	Composite	5	16	18	EPA/600/R-93/116	***	Trace		1
K-21.25	11/1/2000	W.R. Grace Field Sample		Soil	***	Grid K-21.25	Composite	5	16	18	EPA/600/R-93/116	***	Trace		
		· · · · · · · · · · · · · · · · · · ·	+		ъ .			5					1		
1R-03385	11/1/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid K-21.25	Composite	_	6	8	PLM-9002	Α	ND		ND
L-1.5	11/6/2000	W.R. Grace Field Sample	<u> </u>	Soil	***	Grid L-1.5	Composite	5	16	18	EPA/600/R-93/116	***		0.0	
L-6.9	11/6/2000	W.R. Grace Field Sample		Soil	***	Grid L-6.9	Composite	4	16	18	EPA/600/R-93/116	***		0.0	
	1		1	Soil	Droporty.	Grid L-10.13	Composite	4	18	22	PLM-9002	В		4	ND
1R-03396	11/6/2000	Split of W.R. Grace Field Sample	+		Property			1					<	1	ND
L-14.16	11/6/2000	W.R. Grace Field Sample		Soil	***	Grid L-14.16	Composite	3	16	18	EPA/600/R-93/116	***		0.0	
M-1.5	11/6/2000	W.R. Grace Field Sample		Soil	***	Grid M-1.5	Composite	5	16	18	EPA/600/R-93/116	***		0.0	
1R-03407	11/7/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid M-6.10	Composite	5	0	12	PLM-9002	С		2	ND
			+										-	_	
1R-03408	11/9/2000	Split of W.R. Grace Field Sample	1	Soil	Property	Grid 2M-6.10	Composite	5	0	18	PLM-9002	Α	ND		ND
M-11.16	11/6/2000	W.R. Grace Field Sample		Soil	***	Grid M-11.16	Composite	6	16	18	EPA/600/R-93/116	***	1	0.0	. [

									Тор	Bottom	A	nalytical R	esults**		$\neg$
Sample ID	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Depth (inches)*	Depth (inches)*	Method	LA Bin	LA (%)	C (%	6)
Grid N	12/1/2000	W.R. Grace Field Sample		Soil	***	Grid N	Composite	3	16	18	EPA/600/R-93/116	***	0.0		
Grid O	12/4/2000	W.R. Grace Field Sample		Soil	***	Grid O	Composite	5	16	18	EPA/600/R-93/116	***	0.0		
Grid P	12/1/2000	W.R. Grace Field Sample		Soil	***	Grid P	Composite	4	16	18	EPA/600/R-93/116	***	0.0		
Grid Q	11/20/2000	W.R. Grace Field Sample		Soil	***	Grid Q	Composite	5	16	18	EPA/600/R-93/116	***	Trace		
Grid R	11/20/2000	W.R. Grace Field Sample		Soil	***	Grid R	Composite	3	16	18	EPA/600/R-93/116	***	0.0		
S-1.5	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid S-1.5	Composite	5	16	18	EPA/600/R-93/116	***	0.3		
1R-03371	10/28/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid S-1.5	Composite	5	10	18	PLM-9002	С	2	ND	
S-6.10	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid S-6.10	Composite	5	16	18	EPA/600/R-93/116	***	2.0		
1R-03372	10/28/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid S-6.10	Composite	5	10	18	PLM-9002	С	2	ND	
1R-03410	11/9/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid 2S-6.10	Composite	5	12	18	PLM-9002	В	< 1	ND	
1R-03411	11/9/2000	Split of W.R. Grace Field Sample		Soil	Property	duplicate of 1R-03411	Composite	5	12	18	PLM-9002	С	2	ND	
S-11.15	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid S-11.15	Composite	5	16	18	EPA/600/R-93/116	***	0.5		
S-16.20	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid S-16.20	Composite	5	16	18	EPA/600/R-93/116	***	0.8		
S-21.25	10/28/2000	W.R. Grace Field Sample		Soil	***	Grid S-21.25	Composite	5	16	18	EPA/600/R-93/116	***	0.0		
T-1.5	11/2/2000	W.R. Grace Field Sample		Soil	***	Grid T-1.5	Composite	5	16	18	EPA/600/R-93/116	***	Trace		
T-6.10	11/2/2000	W.R. Grace Field Sample		Soil	***	Grid T-6.10	Composite	5	16	18	EPA/600/R-93/116	***	Trace		
T-11.15	11/2/2000	W.R. Grace Field Sample		Soil	***	Grid T-11.15	Composite	5	16	18	EPA/600/R-93/116	***	Trace		
U-1.4	11/6/2000	W.R. Grace Field Sample		Soil	***	Grid U-1.4	Composite	4	16	18	EPA/600/R-93/116	***	0.0		
1R-03401	11/6/2000	Split of W.R. Grace Field Sample		Soil	Property	Grid U-1.4	Composite	4	18	22	PLM-9002	Α	ND	ND	
Grid U	12/4/2000	W.R. Grace Field Sample		Soil	***	Grid U	Composite	3	16	18	EPA/600/R-93/116	***	0.0		
Grid V	12/1/2000	W.R. Grace Field Sample		Soil	***	Grid V	Composite	5	16	18	EPA/600/R-93/116	***	0.0		
Grid W	12/1/2000	W.R. Grace Field Sample		Soil	***	Grid W	Composite	3	16	18	EPA/600/R-93/116	***	0.0		
Grid X	12/1/2000	W.R. Grace Field Sample		Soil	***	Grid X	Composite	4	16	18	EPA/600/R-93/116	***	0.0		
Grid Y	11/20/2000	W.R. Grace Field Sample		Soil	***	Grid Y	Composite	3	16	18	EPA/600/R-93/116	***	Trace		
Grid Z	11/20/2000	W.R. Grace Field Sample		Soil	***	Grid Z	Composite	3	16	18	EPA/600/R-93/116	***	0.0		
Grid AA	11/21/2000	W.R. Grace Field Sample		Soil	***	Grid AA	Composite	2	16	18	EPA/600/R-93/116	***	0.0		
Grid AB	11/21/2000	W.R. Grace Field Sample		Soil	***	Grid AB	Composite	2	16	18	EPA/600/R-93/116	***	0.0		
railroad tracks	12/4/2000	W.R. Grace Field Sample		Soil	***	tracks	Composite	7	0	2	EPA/600/R-93/116	***	< 0.01		

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

Data for samples collected by W.R. Grace and analyzed by R.J. Lee Group using EPA/600/R-93/16 taken from the Final Report Removal Activities at the Export Plant, Libby, Montana. Prepared for W.R. Grace and Company by URS. March 16, 2001.

\* = depths are reported directly from documentation; no attempt is made in this report to rectify discrepencies in samples depths reported by Grace and EPA contractors

\*\* = W.R. Grace field samples analyzed by R.J. Lee Group; splits of W.R. Grace field samples analyzed by EMSL Analytical, which accounts for differences in reporting format

\*\*\* = not reported

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

EPA = United States Environmental Protection Agency

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

% = percent

Table 2-6. Area 1 Investigation Soil Sample Results - March/April/August 2001

									Тор	Bottom		Analytical R	esults		
Sample ID	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Depth (inches)	Depth (inches)	Method	LA Bin	LA (	%)	C (%)
1-01601	3/2/2001	Field Sample		Mining waste	Property	northern section of the	Grab		0	1	PLM-9002	В	<	1	ND
1-01602	3/2/2001	Field Sample		Mining waste	Property	·	Grab		0	1	PLM-9002	С		2	ND
1-01603	3/2/2001	Field Sample		Mining waste	Property	south wall of bag house on the	Grab		0	1	PLM-9002	В	<	1	ND
1-02277	4/19/2001	Field Duplicate	1-02264	Mining waste	Property	Small shed, Southwest corner	Grab		0	6	PLM-9002	С		35	ND
1-02260	4/19/2001	Field Sample		Mining waste	Scale Barn	Scale house, North wall	Grab		0	6	PLM-9002	В	<	1	ND
1-02261	4/19/2001	Field Sample		Mining waste	Warehouse	Warehouse, E. side by door	Grab		0	6	PLM-9002	С		2	ND
1-02262	4/19/2001	Field Sample		Mining waste	Planer Building	Left side of door, Planer Bldg.	Grab		0	6	PLM-9002	С		5	ND
1-02263	4/19/2001	Field Sample		Mining waste	Property	Right side of door, building	Grab		0	6	PLM-9002	В	<	1	ND
1-02264	4/19/2001	Field Sample		Mining waste	Property	Small shed, Southwest corner	Grab		0	6	PLM-9002	С		25	ND
1-02206	4/24/2001	Field Sample		Surface soil	Property	1 1/2-inch minus grade material	Grab		0	6	PLM-9002	Α	ND		ND
1-03398	8/8/2001	Field Sample		Surface soil	Property	between building and RR	Composite	3	0	4	PLM-9002	В	<	1	ND
1-03400	8/10/2001	Field Sample		Surface soil	Property	boundary sample	Grab		0	4	PLM-9002	С		5	ND
1-03401	8/10/2001	Field Sample		Surface soil	Property	boundary sample	Grab		0	4	PLM-9002	С		3	ND
1-03402	8/10/2001	Field Sample		Surface soil	Property	boundary sample	Grab		0	4	PLM-9002	С		В	ND
1-03403	8/10/2001	Field Sample		Surface soil	Property	boundary sample	Grab		0	4	PLM-9002	С		15	ND

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

% = percent

Table 2-7. Area 1 Investigation Bulk Materials Sampling Results - April 2001

			Analy	tical Results	
Sample ID	Sample Date	Sample Group	Method	LA (%)	C (%)
1R-04313	4/19/2001	Planer Shop	PLM-9002	< 1	10
1R-04314	4/19/2001	Planer Shop	PLM-9002	ND	ND
1R-04315	4/19/2001	Planer Shop	PLM-9002	ND	ND
1R-04316	4/19/2001	Planer Shop	PLM-9002	2	< 1
1R-04317	4/19/2001	Planer Shop	PLM-9002	< 1	3
1R-04318	4/19/2001	Planer Shop	PLM-9002	< 1	< 1
1R-04319	4/19/2001	Pole Barn	PLM-9002	5	< 1
1R-04320	4/19/2001	Pole Barn	PLM-9002	2	< 1
1R-04401	4/19/2001	Pole Barn	PLM-9002	2	< 1
1R-04402	4/19/2001	Pole Barn	PLM-9002	< 1	< 1
1R-04403	4/19/2001	Pole Barn	PLM-9002	ND	ND
1R-04404	4/19/2001	Pole Barn	PLM-9002	ND	ND
1R-04405	4/19/2001	Planer Shop	PLM-9002	ND	ND
1R-04406	4/19/2001	Pole Barn	PLM-9002	< 1	ND
1R-04407	4/19/2001	Shed	PLM-9002	< 1	ND
1R-04408	4/19/2001	Shed	PLM-9002	ND	ND
1R-04409	4/19/2001	Shed	PLM-9002	ND	ND
1R-04410	4/19/2001	Shed	PLM-9002	ND	ND
1R-04411	4/19/2001	Shed	PLM-9002	< 1	ND
1R-04412	4/19/2001	Shed	PLM-9002	< 1	ND
1R-04413	4/19/2001	Warehouse	PLM-9002	5	ND
1R-04414	4/19/2001	Warehouse	PLM-9002	< 1	ND
1R-04415	4/19/2001	Warehouse	PLM-9002	2	ND
1R-04416	4/19/2001	Warehouse	PLM-9002	2	ND
1R-04417	4/19/2001	Warehouse	PLM-9002	< 1	ND
1R-04418	4/19/2001	Warehouse	PLM-9002	< 1	ND
1R-04419	4/19/2001	Warehouse	PLM-9002	3	ND
1R-04420	4/19/2001	Warehouse	PLM-9002	< 1	ND
1R-04421	4/19/2001	Warehouse	PLM-9002	< 1	ND
1R-04422	4/19/2001	Warehouse	PLM-9002	2	ND
1R-04423	4/19/2001	Warehouse	PLM-9002	2	ND
1R-04424	4/19/2001	Warehouse	PLM-9002	5	ND
1R-04425	4/19/2001	Warehouse	PLM-9002	< 1	ND
1R-04426	4/19/2001	Scale Barn/ Lumber Storage	PLM-9002	< 1	5
1R-04427	4/19/2001	Scale Barn/ Lumber Storage	PLM-9002	2	ND
1R-04428	4/19/2001	Scale Barn/ Lumber Storage	PLM-9002	3	ND
1R-04429	4/19/2001	Scale Barn/ Lumber Storage	PLM-9002	< 1	10
1R-04430	4/19/2001	Scale Barn/ Lumber Storage	PLM-9002	ND	ND
1R-04431	4/19/2001	Scale Barn/ Lumber Storage	PLM-9002	< 1	< 1

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Recount Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

% = percent

Table 2-8. Area 1 Investigation Dust Sample Results – April/August 2001

															Analyt	tical Results (I	METHOD - ISO	10312)											
																(Dust :	= s/cm²)												
								Li	bby Amphibol	e (LA)							Chrys	sotile (C)							Other Amp	phibole (OA)			
						Ex	cluded Str	uctures	Struc	ctures Detect	ed			Exc	cluded Stru	uctures	Stru	ctures Detec	ted			Exc	luded Struc	ctures	Struc	tures Detect	ed		T
						Aspect							Total	Aspect							Total	Aspect						Total	Total
				Grid	Analytical	Ratio	Length	Diameter	Length	Length	Length	Total	Count	Ratio	Length	Diameter	Length	Length	Length	Total	Count	Ratio	Length	Diameter	Length	Length	Length	Concentration	Count
Sample ID	Sample Date	Sample Group	Area (cm²)	Openings	Sensitivity	<5:1	<0.5 u	>0.5u	0.5 to 5 u	5 to 10 u	>10 u	Concentration LA	LA	<5:1	<0.5 u	>0.5u	0.5 to 5 u	5 to 10 u	>10 u	Concentration C	С	<5:1	<0.5 u	>0.5u	0.5 to 5 u	5 to 10 u	>10 u	OA	OA
1R-04432	4/19/2001	Warehouse	100	10	84,918	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1R-04433	4/19/2001	Warehouse	100	10	84,918	0	0	0	0	169,836	0	169,836	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-03542	8/28/2001	Shed	300	10	2,436	12,182	0	26,800	70,655	19,491	0	129,127	53	0	0	0	4,873	0	0	4,873	2	0	0	0	0	0	0	0	0
1-03543	8/28/2001	Building	300	10	6,090	6,091	0	6,091	67,000	12,182	6,091	97,455	16	0	0	0	6,091	0	0	6,091	1	0	0	0	0	0	0	0	0
1-03544	8/28/2001	Property	300	10	2,436	0	0	2,436	14,618	2,436	0	19,491	8	0	0	0	2,436	0	0	2,436	1	0	0	0	0	0	0	0	0
1-03545	8/28/2001	Property	300	10	609	2,436	0	3,045	30,455	3,655	609	40,200	66	0	0	0	1,827	0	0	1,827	3	0	0	0	0	0	0	0	0

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

OA = Other Amphibole

cm² = square centimeter

s/cm² = Structures per square centimeter

< = less than

> = greater than

u = micron

Table 2-9. Area 1 Removal-Related Dust Sample Results – September/October 2001

															Analy	tical Results	(METHOD - IS	SO 10312)											
																(Dus	st = s/cm²)												
								Lib	by Amphibole	(LA)							Chry	sotile (C)							Other Ar	nphibole (OA	<b>A)</b>		
						Ex	cluded Stru	ctures	Struc	ctures Detect	ted			Exc	luded Stru	ctures	Stru	ctures Detec	ted			Exc	cluded Stru	ctures	Stru	ctures Detec	ted		
					Aspect Total Aspect Aspect Aspect																			Total Concentration	n Total				
			Area	Grid	Analytical	Ratio	Length	Diameter	Length	Length	Length	Total	Count	Ratio	Length	Diameter	Length	Length	Length	Total	Total	Ratio	Length	Diameter	Length	Length	Length	OA	Count
Sample ID	Sample Date	Sample Group	(cm²)	Openings	Sensitivity	<5:1	<0.5 u	>0.5u	0.5 to 5 u	5 to 10 u	>10 u	Concentration LA	LA	<5:1	<0.5 u	>0.5u	0.5 to 5 u	5 to 10 u	>10 u	Concentration C	Count C	<5:1	<0.5 u	>0.5u	0.5 to 5 u	5 to 10 u	>10 u		OA
1R-09971	9/6/2001	Property	300	10	203	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-03852	9/15/2001	Property	300	10	121	0	0	0	365	0	0	365	3	0	0	0	122	0	0	122	1	0	0	0	0	0	0	0	0
1R-10787	10/12/2001	Property	300	10	6,090	0	0	85,273	201,000	140,091	18,273	444,636	73	0	0	0	12,182	6,091	6,091	24,364	4	0	0	6,091	0	0	0	6,091	1
1R-10788	10/12/2001	Property	300	10	1,218	0	0	1,218	2,436	0	0	3,655	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1R-10789	10/12/2001	Property	300	10	6,090	0	0	12,182	0	12,182	0	24,364	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1R-10790	10/12/2001	Planer Shop	300	10	2,436	0	0	0	7,309	0	0	7,309	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1R-10791	10/12/2001	Planer Shop	300	10	609	0	0	609	0	0	0	609	1	0	0	0	609	0	0	609	1	0	0	0	0	0	0	0	0
1R-10792	10/12/2001	Planer Shop	300	10	6,090	6,091	0	18,273	30,455	6,091	6,091	67,000	11	0	0	0	0	6,091	0	6,091	1	0	0	0	0	0	0	0	0

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile OA = Other Amphibole

cm<sup>2</sup> = square centimeter

s/cm² = Structures per square centimeter

< = less than

> = greater than

u = micron

Table 2-10. Area 1 Removal-related Soil Sample Results - October 2001

<b>Sample ID</b> 1R-11541	Sample Date 10/4/2001			Matrix Subsurface soil	Sample Group Property			Number of Subsamples	Тор	Bottom	Analytical Results				
		Category	Parent ID			Location Description (Sub Location)	Sample Type		Depth (inches)	Depth (inches)	Method	LA Bin	LA (%)		C (%)
		Split of W.R. Grace Field Sample				01-01	Composite	5	16	18	PLM-9002	В	<		ND
1R-11542	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of PB-01-02	Composite	5	16	18	PLM-9002	В	<	1	ND
1R-11543	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of PB-01-03	Composite	5	16	18	PLM-9002	В	<	1	ND
1R-11544	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	From bottom of trench; Split of PB-01-04	Composite	5	48	50	PLM-9002	В	<	-	ND
1R-11545	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of PB-01-05	Composite	5	18	20	PLM-9002	В	<		ND
1R-11546	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of LW-01-01	Composite	3	16	18	PLM-9002	В	<	1	ND
1R-11547	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of LW-01-02	Composite	2	16	18	PLM-9002	В	<		ND
1R-11548	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of LW-01-03	Composite	5	16	18	PLM-9002	В	<		ND
1R-11549	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of LW-01-04	Composite	5	16	18	PLM-9002	В	<		ND
1R-11550	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of LW-01-05	Composite	5	18	20	PLM-9002	B	<		ND
1R-11551	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	100 foot by 100 foot grid; Split of LW-01-	Composite	5	16	18	PLM-9002	В	<		ND
1R-11552	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	warehouse; Split of LW-01-07	Composite	5	44	46	PLM-9002	В	<	$\rightarrow$	ND
1R-11552 1R-11553	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil		Split of SB-01-01		4	48	50	PLM-9002 PLM-9002	В	<	$\rightarrow$	ND
1R-11553	10/4/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of SB-01-01	Composite Composite	4	48	50	PLM-9002 PLM-9002	В	<		ND
1R-11554 1R-11555	10/5/2001	Split of W.R. Grace Field Sample			Property	Split of 3B-01-02 Split of EB-01-01		4	16	18	PLM-9002 PLM-9002	В		_	ND
				Subsurface soil	Property	Split of EB-01-01	Composite	4			PLM-9002 PLM-9002		<		
1R-11556	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of EB-01-02 Split of EB-01-03	Composite	· · · · · · · · · · · · · · · · · · ·	16	18		В	<		ND
1R-11557	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	·	Composite	4	16	18	PLM-9002	В	<		ND
1R-11558	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of EB-01-04	Composite	4	16	18	PLM-9002	В	<		ND
1R-11559	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of EB-01-05	Composite	5	16	18	PLM-9002	В	<		ND
1R-11560	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of EB-01-06	Composite	5	16	18	PLM-9002	В	<		ND
1R-11601	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of EB-01-07	Composite	5	16	18	PLM-9002	В	<		ND
1R-11602	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of SS-01-01	Composite	5	16	18	PLM-9002	В	<		ND
1R-11603	10/5/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Split of BN-01-01	Composite	5	16	18	PLM-9002	В	<		ND
1R-11604	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of G-01-01	Composite	5	0	2	PLM-9002	Α	ND	$\perp \perp$	ND
1R-11605	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of G-01-02	Composite	5	0	2	PLM-9002	В	<		ND
1R-11606	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of H-01-01	Composite	5	0	2	PLM-9002	В	<	i	ND
1R-11607	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of H-01-02	Composite	5	0	2	PLM-9002	В	<	i	ND
1R-11608	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of H-01-03	Composite	5	0	2	PLM-9002	Α	ND		ND
1R-11609	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of H-01-04	Composite	5	0	2	PLM-9002	Α	ND		ND
1R-11610	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of H-01-05	Composite	5	0	2	PLM-9002	Α	ND		ND
1R-11611	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of P-01-01	Composite	5	0	2	PLM-9002	Α	ND		ND
1R-11612	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of P-01-02	Composite	5	0	2	PLM-9002	В	<	1	ND
1R-11613	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of P-01-03	Composite	5	0	2	PLM-9002	В	<	1	ND
1R-11614	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of P-01-04	Composite	5	0	2	PLM-9002	В	<	Ī	ND
1R-11615	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Q-01-01	Composite	5	0	2	PLM-9002	Α	ND		ND
1R-11616	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Q-01-02	Composite	5	0	2	PLM-9002	В	<	1	ND
1R-11617	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Q-01-03	Composite	5	0	2	PLM-9002	В	<	1	ND
1R-11618	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Q-01-04	Composite	5	0	2	PLM-9002	Α	ND	$\rightarrow$	ND
1R-11619	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Q-01-05	Composite	5	0	2	PLM-9002	Α	ND	-	ND
1R-11620	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Y-01-01	Composite	5	0	2	PLM-9002	В	<	1	ND
1R-11901	10/9/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of Z-01-01	Composite	5	0	2	PLM-9002	В	<	1	ND
1R-11903	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of ABA-01-01	Composite	5	0	2	PLM-9002	В	<	$\overline{}$	ND
1R-11904	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of AC-01-01	Composite	5	0	2	PLM-9002	В	<		ND
1R-11905	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of CD-01-02	Composite	5	0	2	PLM-9002	В	<	1	ND
1R-11906	10/10/2001	Split of W.R. Grace Field Sample	<b> </b>	Surface soil	Property	Split of DG-01-02	Composite	5	0	2	PLM-9002	В	<	1	ND
1R-11907	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of E-01-01	Composite	5	0	2	PLM-9002	В	<		ND
1R-11907 1R-11908	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of E-01-02	Composite	5	0	2	PLM-9002 PLM-9002	В	<	$\dashv$	ND
1R-11906 1R-11909	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of L-01-02	Composite	5	0	2	PLM-9002 PLM-9002	В	<	$\dashv$	ND
1R-11909	10/10/2001	Split of W.R. Grace Field Sample				Split of IS-01-01	<del></del>	5	0	2	PLM-9002	В	<		ND
1R-11910 1R-11911	10/10/2001	Split of W.R. Grace Field Sample Split of W.R. Grace Field Sample	-	Surface soil	Property	Split of N-01-01	Composite	5	0	2	PLM-9002 PLM-9002	В		$\rightarrow$	ND
1R-11911 1R-11912	10/10/2001	Split of W.R. Grace Field Sample Split of W.R. Grace Field Sample	<b> </b>	Surface soil	Property	Split of N-01-01 Split of N-01-02	Composite				PLM-9002 PLM-9002	В	<	$\dashv$	ND
				Surface soil	Property	·	Composite	5	0	2			<		
1R-11913	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of N-01-03	Composite	5	0	2	PLM-9002	В	<	$\dashv$	ND
1R-11914	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of N-01-04	Composite	5	0	2	PLM-9002	В	<	<del>:  </del>	ND
1R-11915	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of N-01-05	Composite	5	0	2	PLM-9002	В	<		ND
1R-11916	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of W-01-01	Composite	5	0	2	PLM-9002	В	<	1	ND
1R-11917	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of W-01-02	Composite	5	0	2	PLM-9002	В	<	<u></u>	ND
1R-11918	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of W-01-03	Composite	5	0	2	PLM-9002	В	<		ND
1R-11919	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of X-01-01	Composite	5	0	2	PLM-9002	В	<	1	ND
1R-11920	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of X-01-02	Composite	5	0	2	PLM-9002	В	<	1	ND
1R-12121	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of X-01-03	Composite	5	0	2	PLM-9002	В	<	ı E	ND

Table 2-10. Area 1 Removal-related Soil Sample Results – October 2001

										Bottom	Analytical Results				
					Sample	Location Description	Sample	Number of	Depth	Depth					
Sample ID	Sample Date	Category	Parent ID	Matrix	Group	(Sub Location)	Type	Subsamples	(inches)	(inches)	Method	LA Bin	LA (%)	C (%)	
1R-12122	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of X-01-04	Composite	5	0	2	PLM-9002	В	< 1	ND	
1R-12123	10/10/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Split of X-01-05	Composite	5	0	2	PLM-9002	В	< 1	ND	
1R-12124	10/16/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Surface from non impacted areas	Composite	5	0	2	PLM-9002	Α	ND	ND	
1R-12125	10/16/2001	Split of W.R. Grace Field Sample		Surface soil	Property	side of site	Composite	5	0	2	PLM-9002	Α	ND	ND	
1R-12126	10/16/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Surface from non impacted areas	Composite	5	0	2	PLM-9002	Α	ND	ND	
1R-12127	10/16/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Surface from non impacted area	Composite	5	0	2	PLM-9002	Α	ND	ND	
1R-12128	10/16/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Surface from non impacted area	Composite	5	0	2	PLM-9002	Α	ND	ND	
1R-12129	10/16/2001	Split of W.R. Grace Field Sample		Surface soil	Property	Surface from non impacted area	Composite	5	0	2	PLM-9002	Α	ND	ND	
1R-12130	10/16/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Depth from impacted area	Grab		8	10	PLM-9002	В	< 1	ND	
1R-12131	10/16/2001	Split of W.R. Grace Field Sample		Subsurface soil	Property	Depth from non impacted area	Grab		8	10	PLM-9002	В	< 1	ND	

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

% = percent

Table 2-11. Area 1 Removal-related Personal Air Sample Results – September and October 2001

				METHOD - ISO 10312 (s/cc)													AHERA				
						Libby Amphiboles ( LA )								PCM (NIOSH 7400)			AREKA				
						Ex	cluded Stru	uctures	Structures Detected					(f/cc)	Libby Amphiboles ( LA )						
Sample ID	Task	Volume (L)	Sample Date				Grid Openings	Analytical Sensitivity	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Concentration LA	Total Count LA	Concentration	S <5u	S >5u	Analytical Sensitivity (s/cc)	Asbestos Concentration (s/cc)
1R-09084	Labor - Removing roof	710	9/5/2001	10	0.0054	0.0054	0	0.0488	0.0163	0	0.0054	0.0759	14	0.099		N	ot analyzed by <i>I</i>	AHERA			
1R-09969	Decon roof	612	9/6/2001	10	0.0057	0	0	0.0057	0.0229	0.0057	0	0.0343	6	NA		N	ot analyzed by A	AHERA			
1R-09970	Decon roof	50	9/6/2001	10	0.0700	0	0	0	0	0	0	0	0	NA		Not analyzed by AHERA					
1R-09978	Operate - Excavator	700	9/7/2001	10	0.0090	0	0	0	0	0	0	0	0	<0.008	0	0	0.00426	<0.00426			
1R-09979	Operate - Excavator	66	9/7/2001	10	0.0956	0	0	0	0	0	0	0	0	<0.041	0	0	0.004522	<0.004522			
1R-10089	Spray down	765	9/10/2001	10	0.0083	0	0	0	0	0	0	0	0	0.02	1	1	UNK	0.00975			
1R-10090	Spray down	46	9/10/2001	10	0.1372	0	0	0	0	0	0	0	0	0.064	0	0	0.06488	<0.06488			
1R-10150	Removing sheet metal	737	9/11/2001	10	0.0086	0	0	0	0	0	0	0	0	0.043	3	3	UNK	0.02700			
1R-10167	Watering	690	9/12/2001	10	0.2735	0	0	0	0	0	0	0	0	<0.105	0	0	0.11639	<0.11639			
1R-10098	Drive - Truck	716	9/13/2001	10	0.0088	0	0	0.0176	0	0.0088	0.0088	0.0353	4	0.058	0	7	0.00051	0.03242			
1R-10101	Follow trucks	32	9/13/2001	10	0.1972	0	0	0	0	0	0	0	0	0.13	0	0	0.09327	<0.09327			
1R-10115	Operate - Excavator	686	9/14/2001	10	0.0092	0	0	0	0	0	0	0	0	0.011	2	2	UNK	0.02010			
1R-10118	Follow trucks	62	9/14/2001	10	0.1018	0	0	0	0	0	0	0	0	0.119	0	0	0.04814	<0.04814			
1R-10552	Watering down	652	9/17/2001	10	0.0097	0	0	0.0194	0	0	0	0.0194	2	0.021	0	0	0.00458	<0.00458			
1R-10564	Drive - Truck	686	9/18/2001	10	0.0092	0	0	0.0184	0.0092	0.0092	0	0.0368	4	0.081	4	3	0.00054	0.03384			
1R-10580	Watering debris	738	9/19/2001	10	0.0086	0	0	0.0085	0.0085	0	0	0.0171	2	0.012	0	1	0.00040	0.00404			
1R-10675	Decon wash	696	9/20/2001	10	0.0091	0	0	0.0091	0.0091	0.0091	0	0.0272	3	0.023	2	1	0.00043	0.01286			
1R-10689	Watering debris	716	9/21/2001	10	0.0088	0	0	0	0	0	0	0	0	0.011	0	0	0.00963	< 0.00963			
1R-10723	Decon wash	657	9/22/2001	10	0.0096	0	0	0	0	0	0	0	0	0.038	7	3	UNK	0.04543			
1R-10739	Drive - Truck	763	9/24/2001	10	0.0083	0	0	0	0	0	0	0	0	0.186	8	11	0.00061	0.09290			
1R-10755	Watering debris	636	9/25/2001	10	0.0099	0	0	0.0099	0	0	0	0.0099	1	0.006	0	1	0.00047	0.00469			
1R-11211	Wash Truck	667	9/26/2001	10	0.0095	0	0	0	0.0284	0	0.0095	0.0378	4	0.021	2	1	0.00055	0.01492			
1R-11227	Watering debris	649	9/27/2001	10	0.0054	0	0	0	0	0	0	0	0	0.007	0	1	UNK	0.00461			
1R-11263	Operate - Excavator	713	9/28/2001	10	0.0049	0	0	0	0	0	0	0	0	0.004	0	0	0.00465	<0.00465			
1R-11277	Drive - Truck	858	9/29/2001	10	0.0171	0	0	0.0171	0.0512	0	0	0.0682	4	NA	0	0	UNK	UNK			
1R-11496	Drive - Truck	1373	10/2/2001	10	0.0025	0.0025	0	0	0.0127	0	0	0.0153	6	0.011	0	0	0.00435	<0.00435			
1R-11513	Decon trucks	679	10/3/2001	10	0.0052	0.0258	0	0.0052	0	0.0052	0	0.0361	7	0.051	1	3	0.00054	0.01954			
1R-11528	Operate - Excavator	770	10/4/2001	10	0.0045	0	0	0	0	0	0.0045	0.0045	1	0.019	0	2	0.00061	0.00969			
1R-11583	Drive - Truck	876	10/5/2001	10	0.0040	0.0240	0	0.0320	0.0360	0	0	0.0919	23	NA	0	0	UNK	UNK			
1R-11596	Drive - Haul truck	788	10/8/2001	10	0.0044	0.0044	0	0.0089	0.0222	0.0133	0	0.0489	11	0.041	0	0	0.00473	<0.00473			
1R-11651	Decon of haul trucks	821	10/9/2001					Not analyzed	by ISO 10312	2				0.059	0	0	0.00454	<0.00454			
1R-11630	Drive - Truck	693	10/10/2001	Not analyzed by ISO 10312										0.083	0	0	0.00479	<0.00479			
1R-10830	Decon	461	10/17/2001		Not analyzed by ISO 10312 0.028										1	1	UNK	0.01289			
1R-10831	Decon	82	10/17/2001		Not analyzed by ISO 10312 0.051										0	0	0.03640	<0.03640			
1R-10833	Decon	461	10/17/2001		Not analyzed by ISO 10312									0.07	2	2	UNK	0.02578			
1R-10834	Decon	85	10/17/2001		Not analyzed by ISO 10312								0.231	0	1	UNK	0.03511				

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc. AHERA = asbestos hazardemergency response act

LA = Libby Amphibole

PCM = Phase contrast microscopy

NIOSH 7400 = National Institute for Occupational Safety and Health method 7400

ISO 10312 = International Organization of Standards Method 10312

S = structure

UNK = unknown

L = liters

cm2 = square centimeter

s/cc = Structures per cubic centimeter

f/cc = fibers per cubic centimeter

< = less than

> = greater than

u = micron

Table 2-12 - Area 1 Investigation Bulk Materials Sample Results – April 2002

			Analyti	cal Results	
Sample ID	Sample Date	Sample Group	Method	LA (%)	C (%)
1-06787	4/9/2002	Lumber Yard	PLM-9002	ND	ND
1-06788	4/9/2002	Lumber Yard	PLM-9002	ND	ND

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

% = percent

Table 2-13. Area 1 Investigation Soil Sample Results – May 2002

									Тор	Bottom	ı	Analytical F	Results	
					Sample	Location Description	Sample	Number of	Depth	Depth				1
Sample ID	Sample Date	Category	Parent ID	Matrix	Group	(Sub Location)	Type	Subsamples	(inches)	(inches)	Method	LA Bin	LA (%)	C (%)
1R-13766	5/8/2002	Field Sample		Surface soil	Property	Area surrounding connex boxes	Composite	3	0	2	PLM-9002	В	< 1	ND
1R-13767	5/8/2002	Field Sample		Surface soil	Property	Area near railroad tracks	Composite	3	0	1	PLM-9002	В	< 1	ND

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

ND = non-detect

% = percent

C = Chrysotile

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

Table 2-14. Area 1 Removal-related Soil Sample Results – December 2002

									Тор	Bottom	1	Analytical F	Results	
		_				Location Description	Sample	Number of	Depth	Depth				i l
Sample ID	Sample Date	Category	Parent ID	Matrix	Sample Group	(Sub Location)	Type	Subsamples	(inches)	(inches)	Method	LA Bin	LA (%)	C (%)
1R-13769	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-1	Composite	5	18	20	PLM-9002	В	< 1	ND ND
1R-13770	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-2	Composite	5	18	20	PLM-9002	B B	< 1	
1R-13771	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-3	Composite	5	18	20	PLM-9002		< 1 ND	ND
1R-13772	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-4	Composite	5	18	20	PLM-9002	A		ND
1R-13773	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-5	Composite	5	18	20	PLM-9002	В	< 1	ND
1R-13774	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-6	Composite	5	18	20	PLM-9002	В	< 1	ND ND
1R-13775	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-7	Composite	5	18	20	PLM-9002	В	< 1	
1R-13776	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-8	Composite	5	18	20	PLM-9002	A	ND	ND
1R-13777	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-9	Composite	5	18	20	PLM-9002	A	ND	ND
1R-13778	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-10	Composite	5	18	20	PLM-9002	В	< 1	ND
1R-13779	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-11	Composite	5	72	74	PLM-9002	В	< 1	ND
1R-13780	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-12	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17381	12/3/2002	W.R. Grace Field		Subsurface soil	Property	EXP-13	Composite	5	18	20	PLM-9002		*	*
1R-17382	12/3/2002	W.R. Grace Field		Subsurface soil	Property	EXP-14	Composite	5	18	20	PLM-9002		*	*
1R-17383	12/3/2002	W.R. Grace Field		Subsurface soil	Property	EXP-15	Composite	5	18	20	PLM-9002		*	*
1R-17384	12/3/2002	W.R. Grace Field		Subsurface soil	Property	EXP-16	Composite	5	18	20	PLM-9002		*	*
1R-17385	12/3/2002	W.R. Grace Field		Subsurface soil	Property	EXP-17	Composite	5	18	20	PLM-9002		*	*
1R-17386	12/3/2002	W.R. Grace Field		Subsurface soil	Property	EXP-18	Composite	5	18	20	PLM-9002		*	*
1R-17387	12/3/2002	W.R. Grace Field		Subsurface soil	Property	EXP-19	Composite	5	18	20	PLM-9002		*	*
1R-17388	12/3/2002	W.R. Grace Field		Subsurface soil	Property	EXP-20	Composite	5	18	20	PLM-9002		*	*
1R-17389	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-21	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17390	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-22	Composite	5	18	20	PLM-9002	В	< 1	ND
1R-17391	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-23	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17392	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-24	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17393	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-25	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17394	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-41	Composite	5	36	38	PLM-9002	В	< 1	ND
1R-17395	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-27	Composite	5	18	20	PLM-9002	В	< 1	ND
1R-17396	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-29	Composite	5	18	20	PLM-9002	В	< 1	ND
1R-17397	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-32	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17398	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-36	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17399	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-40	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17400	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-39	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17401	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-38	Composite	5	18	20	PLM-9002	В	< 1	ND
1R-17402	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-37	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17403	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-33	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17404	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-34	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17405	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-35	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-17406	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-31	Composite	5	18	20	PLM-9002	В	< 1	ND
1R-17407	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-30	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17408	12/3/2002	W.R. Grace Field	1	Subsurface soil	Property	Exp-28	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17409	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Exp-26	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17410	12/3/2002	W.R. Grace Field		Subsurface soil	Property	Driveway	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17411	12/3/2002	W.R. Grace Field		Subsurface soil	Driveway	Drive on S side of site	Composite	5	18	20	PLM-9002	A	ND	ND
1R-17412	12/3/2002	W.R. Grace Field		Subsurface soil	Property/Excava	Bottom of Waterline Hole	Composite	5	120	122	PLM-9002	A	ND	ND
17-12	5, _ 500_	5.300 i loid	1	34254400 0011	op only/ Exocava		30poolto	<u> </u>	0		0002	,	1	

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

W.R. Grace = W.R. Grace and Company

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

% = percent

- < = less than
- \* = archived samples; results not available

#### CDM

Table 2-15. Area 1 Removal-related Personal Air Sample Results – October/December 2002

Sample ID	Task	Volume (L)	Sample Date	PCM (NIOSH 7400) (f/cc)
1R-15806	Hepa vac/wiping down	344	10/7/2002	0.166
1R-15809	Hepa vac/wiping down	416	10/8/2002	0.492
1R-15811	Hepa vac/wiping down	70	10/8/2002	0.238
1R-15745	Cleaning	362	10/9/2002	0.026
1R-15746	Cleaning	329	10/9/2002	0.031
1R-15747	Cleaning	65	10/9/2002	0.151
1R-15752	Cleaning	337	10/10/2002	0.362
1R-15889	Cleaning	362	10/11/2002	0.014
1R-15890	Cleaning	63	10/11/2002	< 0.043
1R-15891	Cleaning	166	10/11/2002	< 0.016

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, et NIOSH 7400 = National Institute for Occupational Safety and Health method 7400

PCM = Phase contrast microscopy

L = liters

f/cc = fibers per cubic centimeter

Table 2-16. Area 1 Investigation Soil Sample Results – June 2006

									Тор	Bottom		Analytical I	Results	
Sample ID	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Depth (inches)	Depth (inches)	Method	LA Bin	LA (%)	C (%)
1-08278-B	6/9/2006	Field Sample		Surface soil	Stockpile	Field	Composite	5	0	2	PLM-9002	B2	< 1	ND
1-08279-B	6/9/2006	Field Sample		Surface soil	Stockpile	Field	Composite	5	0	2	PLM-9002	Α	ND	ND
1-08280-B	6/9/2006	Field Sample		Surface soil	Stockpile	Field	Composite	5	0	2	PLM-9002	Α	ND	ND
1-08281-B	6/9/2006	Field Sample		Surface soil	Stockpile	Field	Composite	5	0	2	PLM-9002	Α	ND	ND
1-08282-B	6/9/2006	Field Sample		Surface soil	Field	Field	Composite	5	0	2	PLM-9002	С	2	ND
1-08283-B	6/9/2006	Field Sample		Surface soil	Field	Field	Composite	5	0	2	PLM-9002	С	3	ND
1-08284-B	6/9/2006	Field Sample		Surface soil	Field	Field	Composite	5	0	2	PLM-9002	С	1	ND
1-08285-B	6/9/2006	Field Sample		Surface soil	Field	Field	Composite	5	0	2	PLM-9002	С	1	ND

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

B suffix in Sample ID = non-processed sample

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

% = percent

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

Table 2-17. Area 1 Surface Soil Sample Results – September 2007

											An	alytical Res	ults
										_		PLM-VE	
Sample ID	Sample	Catagory	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample	Number of Subsamples	Top Depth	Bottom Depth	LA Bin	LA (%)	C (%)
Sample ID EP-00001	<b>Date</b> 9/12/2007	Category Field Sample	Parent ID	Surface soil	Property	Former export plant area 1	Type Composite	30	(inches)	(inches)	A	ND	ND
P-00001	9/18/2007	Field Sample		Surface soil	Property	Area 1 - 4	Composite	30	0	6	A	ND	ND
P-00027	9/18/2007	Field Sample		Surface soil	Property	Area 1 - 3	Composite	30	0	6	A	ND	ND
P-00027	9/18/2007	Field Sample		Surface soil	Property	Area 1 - 2	Composite	30	0	6	A	ND	ND
P-00029	9/18/2007	Field Sample		Surface soil	Property	Area 1 - 9	Composite	30	0	6	A	ND	ND
P-00029	9/18/2007	Field Sample		Surface soil	Property	Area 1 - 18	Composite	30	0	6	A	ND	ND
P-00031	9/18/2007	Field Sample		Surface soil	Property	Area 1 - 17	Composite	30	0	6	A	ND	ND
P-00031	9/18/2007	Field Sample		Surface soil	Property	Area 1 - 17	Composite	0	0	6	A	ND	ND
P-00032	9/18/2007	Field Sample		Surface soil	Property	Area 1 - 16	Composite	30	0	6	A	ND	ND
P-00034	9/18/2007	Field Duplicate	EP-00033	Surface soil	Property	Area 1 - 16	Composite	30	0	6	A	ND	ND
P-00034	9/18/2007	Field Sample	LF-00033	Surface soil	Property	Area 1 - 35	Composite	30	0	6	B1	TR	ND
P-00040	9/19/2007	Field Sample		Surface soil	Property	Area 1 - 11	Composite	30	0	6	B1	TR	ND
P-00040	9/19/2007	Field Sample		Surface soil	Property	Area 1 - 6	Composite	30	0	6	B1	TR	ND
P-00049				Surface soil	Property	Area 1 - 5		30	0	6	B1	TR	ND
P-00050	9/19/2007	Field Sample Field Sample		Surface soil	Property	Area 1 - 12	Composite Composite	30	0	6	B1	TR	ND
				Surface soil	· · · · ·	Area 1 - 12 Area 1 - 10					A	ND ND	ND
P-00052	9/19/2007	Field Sample		Surface soil	Property Property	Area 1 - 10	Composite	30 30	0	6			ND
P-00055	9/19/2007	Field Sample				Area 1 - 20	Composite			-	A	ND	ND
P-00056	9/19/2007	Field Sample		Surface soil	Property		Composite	30	0	6	A	ND	
P-00057	9/19/2007	Field Sample		Surface soil	Property	Area 1 - 19	Composite	30	0	6	A	ND	ND
P-00058	9/19/2007	Field Duplicate	EP-00057	Surface soil	Property	Area 1 - 19	Composite	30	0	6	A	ND	ND
P-00059	9/20/2007	Field Sample		Surface soil	Property	Area 1-29	Composite	30	0	6	A	ND	ND
P-00060	9/20/2007	Field Sample		Surface soil	Property	Area 1-37	Composite	30	0	6	A	ND	ND
P-00061	9/20/2007	Field Sample		Surface soil	Property	Area 1-38	Composite	30	0	6	A	ND	ND
P-00066	9/20/2007	Field Sample		Surface soil	Property	Area 1-39	Composite	30	0	6	B1	TR	ND
P-00067	9/20/2007	Field Sample		Surface soil	Property	Area 1-30	Composite	30	0	6	Α	ND	ND
P-00068	9/20/2007	Field Sample		Surface soil	Property	Area 1-40	Composite	30	0	6	A	ND	ND
P-00084	9/21/2007	Field Sample		Surface soil	Property	Area 1-24	Composite	30	0	6	B1	TR	ND
P-00085	9/21/2007	Field Sample		Surface soil	Property	Area 1-22	Composite	30	0	6	Α	ND	ND
P-00086	9/21/2007	Field Sample		Surface soil	Property	Area 1-23	Composite	30	0	6	Α	ND	ND
P-00087	9/21/2007	Field Sample		Surface soil	Property	Area 1-13	Composite	30	0	6	B1	TR	ND
P-00088	9/21/2007	Field Sample		Surface soil	Property	Area 1-27	Composite	30	0	6	Α	ND	ND
P-00089	9/21/2007	Field Sample		Surface soil	Property	Area 1-32	Composite	30	0	6	Α	ND	ND
P-00090	9/21/2007	Field Sample		Surface soil	Property	Area 1-15	Composite	30	0	6	Α	ND	ND
P-00091	9/21/2007	Field Sample		Surface soil	Property	Area 1-31	Composite	30	0	6	Α	ND	ND
P-00092	9/21/2007	Field Sample		Surface soil	Property	Area 1-14	Composite	30	0	6	Α	ND	ND
P-00093	9/21/2007	Field Duplicate	EP-00088	Surface soil	Property	Area 1-27	Composite	30	0	6	Α	ND	ND
P-00094	9/21/2007	Field Sample		Surface soil	Property	Area 1-28	Composite	30	0	6	B1	TR	ND
P-00095	9/21/2007	Field Sample		Surface soil	Property	Area 1-33	Composite	30	0	6	B1	TR	ND
P-00096	9/21/2007	Field Sample		Surface soil	Property	Area 1-36	Composite	30	0	6	B1	TR	ND
P-00097	9/21/2007	Field Sample		Surface soil	Property	Area 1-34	Composite	30	0	6	Α	ND	ND
P-00098	9/21/2007	Field Sample		Surface soil	Property	Area 1-40	Composite	30	0	6	B1	TR	ND
P-00099	9/21/2007	Field Sample		Surface soil	Property	Area 1-1	Composite	30	0	6	B1	TR	ND

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

TR = trace

PLM-VE = visual estimation method

PLM-Grav = gravimetric method

% = percent

Table 2-18. Area 1 Indoor Activity Based Sampling Personal Air Sample Results - October/November 2007

											Analytical	Results (METHO	D - ISO 1	0312)							
								Libby A	Amphibole ( L	A )		,,					Other Amphi	bole ( OA )			
						Exc	luded Struc	tures	Struc	tures Detect	ed			Exc	luded Struc	tures	Struc	tures Detect	ed		
Sample ID	Sample Date	Task	Volume (L)	Grid Openings	Analytical Sensitivity	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Concentration LA	Total Count LA	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Concentration OA	Total Count OA
EP-00102	10/30/2007	Active-garage	858	100	0.0027	0	0	0	0.0027	0	0	0.0027	1	0	0	0	0	0	0	0	0
EP-00108	10/30/2007	Active-garage	272	100	0.0085	0	0	0.0085	0.0169	0.0169	0	0.0423	5	0	0	0	0	0	0	0	0
EP-00109	10/30/2007	Active-garage	474	102	0.0238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EP-00110	10/30/2007	Active-garage	931	102	0.0121	0	0	0	0.0121	0	0	0.0121	1	0	0	0	0	0	0	0	0
EP-00112	10/31/2007	Active-garage	468	100	0.0049	0.0098	0	0	0.0147	0	0	0.0246	5	0	0	0	0	0	0	0	0
EP-00118	10/31/2007	Active-garage	624	102	0.0181	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EP-00120	10/31/2007	Active-garage	329	100	0.0070	0.0140	0	0.0210	0.0140	0.0140	0.0070	0.0699	10	0	0	0	0	0	0	0	0
EP-00121	10/31/2007	Active-garage	503	100	0.0046	0	0	0	0.0046	0	0	0.0046	1	0	0	0	0	0	0	0	0
EP-00122	10/31/2007	Active-garage	553	100	0.0042	0.0042	0	0	0.0042	0	0	0.0083	2	0	0	0	0	0	0	0	0
EP-00124	11/1/2007	Active-garage	326	100	0.0071	0.0071	0	0.0071	0	0	0.0071	0.0212	3	0	0	0	0	0	0	0	0
EP-00131	11/1/2007	Active-garage	299	100	0.0077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EP-00132	11/1/2007	Active-garage	447	100	0.0051	0.0051	0	0	0.0154	0	0	0.0206	4	0	0	0	0	0	0	0	0
EP-00133	11/1/2007	Active-garage	295	100	0.0195	0	0	0.0195	0	0	0	0.0195	1	0	0	0	0	0	0	0	0
EP-00135	11/1/2007	Active-garage	410	100	0.0140	0	0	0	0.0280	0	0	0.0280	2	0	0	0	0	0	0	0	0
EP-00136	11/1/2007	Active-garage	309	100	0.0186	0	0	0	0.0186	0	0	0.0186	1	0	0	0	0	0	0	0	0
EP-00137	11/1/2007	Active-garage	339	100	0.0170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EP-00142	11/7/2007	Passive-meeting room	1256	106	0.0003	0.0026	0	0	0	0	0.0053	0.0079	3	0	0	0	0	0	0	0	0
EP-00147	11/7/2007	Active-meeting room	1256	105	0.0003	0	0	0.0005	0.0003	0	0.0003	0.0011	4	0	0	0	0	0	0	0	0
EP-00162	11/6/2007	Passive-meeting room	1158	100	unk	0	0	0.0003	0	0	0	0.0003	1	0	0	0	0	0	0	0	0
EP-00167	11/6/2007	Active-meeting room	1238	104	0.0010	0	0	0.0029	0.0039	0.0010	0.0010	0.0088	9	0	0	0	0	0	0	0	0
EP-00170	11/8/2007	Passive-meeting room	1262	100	0.0003	0	0	0	0	0.0003	0	0.0003	1	0	0	0	0	0	0	0	0
EP-00171	11/8/2007	Active-meeting room	1174	102	0.0003	0.0003	0	0.0006	0.0009	0.0003	0.0003	0.0023	8	0	0	0	0	0	0	0	0

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

OA = Other Amphibole

ISO 10312 = International Organization of Standards 10312 method

s/cc = Structures per cubic centimeter

% = percent

< = less than

> = greater than

u = micron unk - unknown

Table 2-19. Area 1 Investigation Dust Sample Results - October/November 2007

												Analytical Result	ts (METH	DD - ISO 10	312)						
												(Du	ıst = s/cm	<sup>2</sup> )							
								Libby	/ Amphibole (	LA)							Other Amp	hibole ( OA )			
						Exc	cluded Stru	ctures	Strue	ctures Detec	ted			Ex	cluded Stru	ctures	Stru	ctures Detec	ted		
Sample ID	Sample Date	Location Description	Area (cm²)	Grid Openings	Analytical Sensitivity	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Concentration LA	Total Count LA	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Concentration OA	Total Count OA
EP-00106	10/30/2007	Garage	1000	29	19.82	0	0	0	20	0	0	20	1	0	0	0	0	0	0	0	0
EP-00115	10/31/2007	Garage	1000	12	19.16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EP-00128	11/1/2007	Garage	1000	12	19.16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EP-00145	11/7/2007	Meeting room	1000	10	12.58	0	0	0	25	25	25	75	6	0	0	0	0	0	0	0	0
EP-00165	11/6/2007	Meeting room	1000	10	6.29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EP-00174	11/8/2007	Meeting room	1000	10	6.29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EP-00104	10/30/2007	Vehicle	1000	29	19.82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EP-00113	10/31/2007	Vehicle	1000	15	15.33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EP-00127	11/1/2007	Vehicle	1000	12	19.16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

OA = Other Amphibole

ISO 10312 = International Organization of Standards 10312 method

< = less than

> = greater than

u = micron

cm<sup>2</sup> = square centimeter

s/cm<sup>2</sup> = Structures per square centimeter

Table 2-20. Area 1 Investigation Personal Air Sample Results – September 2007

					Analy	tical Results	for LA (ME) (Air = s/cc)	THOD - ISO 1	0312)			
				Exclu	ded Structu	ıres	Stru	ctures Dete	cted			
Sample ID	Volume (L)	Grid Openings	Analytical Sensitivity	Aspect Ratio <5:1	Length <0.5u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length >10u	Total Concentration LA	Total Count LA	PCM (NIOSH 7400) (f/cc)
EP-00004	61	105	0.0046	0	0	0	0	0.0046	0	0.0046	1	<0.044
EP-00005	147	105	0.0019	0	0	0	0	0.0038	0	0.0038	2	0.033
EP-00006	184	105	0.0015	0	0	0	0	0	0	0	0	0.069
EP-00007	66	105	0.0043	0	0	0	0.0043	0	0	0.0043	1	0.059
EP-00013	138	105	0.0020	0.0061	0	0.0164	0.0102	0.0123	0.0266	0.0715	35	0.11
EP-00014	61	105	0.0046	0	0	0	0.0046	0	0	0.0046	1	<0.044
EP-00015	253	105	0.0011	0	0	0.0022	0.0033	0.0011	0.0022	0.0089	8	0.033
EP-00017	92	105	0.0031	0	0	0	0	0	0	0	0	0.032

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

OA = Other Amphibole

NIOSH 7400 = National Institute for Occupational Safety and Health method 7400

ISO 10312 = International Organization of Standards Method 10312

PCM = phase contrast microscopy

f/cc = fibers per cubic centimeter

L = liters

s/cc = Structures per cubic centimeter

u = micron

< = less than

> = greater than

Table 2-21. Area 2 Investigation Soil Sample Results – May/July 2003

									Тор	Bottom		Analytical F	Results	
Sample ID	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Depth (inches)	Depth (inches)	Method	LA Bin	LA (%)	C (%)
1-07851	5/22/2003	Field Sample		Surface soil	Property	On ramp-concrete pad area closest to river	Composite	5	0	1	PLM-9002	Α	ND	ND
1-07852	5/22/2003	Field Sample		Surface soil	Property	On ramp-middle asphalt area	Composite	5	0	1	PLM-9002	Α	ND	ND
1-07853	5/22/2003	Field Sample		Surface soil	Property	On ramp-top asphalt area	Composite	5	0	1	PLM-9002	Α	ND	ND
1-07731-FG1	7/19/2003	Field Sample		Surface soil	Driveway	north and south edges of concrete pad	Composite	5	0	6	PLM-VE	B2	< 1	ND
1-07732-FG1	7/19/2003	Field Sample		Surface soil	Driveway	east of concrete pad	Composite	5	0	6	PLM-VE	B1	TR	ND

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

FG1 suffix in Sample ID = fine ground sample portion

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

TR = trace

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

PLM-VE = visual estimation method

% = percent

Table 2-22. Area 2 Pre-removal Soil Sample Results – September/October 2003

									Тор	Bottom		Analytical I	Results	
					Sample	Location Description	Sample	Number of	Depth	Depth				
Sample ID	Sample Date	Category	Parent ID	Matrix	Group	(Sub Location)	Type	Subsamples	(inches)	(inches)	Method	LA Bin	LA (%)	C (%)
CS-16698-FG	9/10/2003	Field Sample		Subsurface soil	Park	Area TP1	Grab		36	38	PLM-VE	Α	ND	ND
CS-16699-FG	9/10/2003	Field Sample		Subsurface soil	Park	Area TP2	Grab		36	39	PLM-VE	Α	ND	ND
CS-16700-FG	9/10/2003	Field Sample		Subsurface soil	Park	Area TP3	Grab		14	16	PLM-VE	Α	ND	ND
CS-16821-FG	9/10/2003	Field Sample		Subsurface soil	Park	Area TP3A	Grab		36	38	PLM-VE	Α	ND	ND
CS-16835-FG	9/12/2003	Field Sample		Subsurface soil	Park	TP4	Grab		36	38	PLM-VE	Α	ND	ND
CS-16836-FG	9/12/2003	Field Sample		Subsurface soil	Park	TP4-A	Grab		36	38	PLM-VE	Α	ND	ND
CS-16837-FG	9/12/2003	Field Sample		Subsurface soil	Park	TP5	Grab		12	18	PLM-VE	Α	ND	ND
CS-16838-FG	9/12/2003	Field Sample		Subsurface soil	Park	TP8	Grab		36	38	PLM-VE	Α	ND	ND
CS-16839-FG	9/12/2003	Field Sample		Subsurface soil	Park	TP6	Grab		36	38	PLM-VE	B1	TR	ND
CS-16840-FG	9/12/2003	Field Duplicate	CS-16839	Subsurface soil	Park	TP6	Grab		36	38	PLM-VE	B1	TR	ND
CS-16841-FG	9/12/2003	Field Sample		Subsurface soil	Park	TP11	Grab		36	38	PLM-VE	Α	ND	ND
CS-16842-FG	9/12/2003	Field Sample		Subsurface soil	Park	TP1A	Grab		36	38	PLM-VE	Α	ND	ND
CS-16843-FG	9/12/2003	Field Sample		Subsurface soil	Park	TP10	Grab		36	38	PLM-VE	Α	ND	ND
CS-16844-FG	9/12/2003	Field Sample		Subsurface soil	Park	TP9	Grab		12	14	PLM-VE	Α	ND	ND
CS-16845-FG	9/12/2003	Field Sample		Subsurface soil	Park	TP7	Grab		14	16	PLM-VE	Α	ND	ND
CS-16846-FG	9/12/2003	Field Sample		Subsurface soil	Park	TP6A	Grab		36	38	PLM-VE	Α	ND	ND
CS-17477-B	10/23/2003	Field Sample		Subsurface soil	Park	Test pit 12	Grab		35	38	PLM-9002	Α	ND	ND
CS-17477-FG1	10/23/2003	Field Sample		Subsurface soil	Park	Test pit 12	Grab		35	38	PLM-VE	B1	TR	ND

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc. FG/FG1 suffix in Sample ID = fine ground sample portion

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

TR = trace % = percent

PLM = polarized light microscopy

PLM-VE = visual estimation method

Table 2-23. Area 2 Removal-related Soil Sample Results – October/November 2003

1R-23244-B 10/2 1R-21994-B 10/6 1R-21995-B 10/6 1R-21996-B 10/7 1R-21997-B 10/7 1R-21999-B 10/8 1R-22900-B 10/8 1R-23245-B 10/8 1R-23246-B 10/9 1R-23247-B 10/9	mple Date 0/2/2003 0/6/2003 0/6/2003 0/6/2003 0/7/2003 0/7/2003 0/7/2003 0/8/2003 0/8/2003	Category Field Sample Field Sample Field Sample Field Sample Field Sample Field Sample	Parent ID	Matrix Surface soil Surface soil Surface soil	Sample Group Park Park	Location Description (Sub Location) Grid 38	Sample Type	Number of Subsamples	Depth (inches)*	Depth (inches)*	Method	LA Bin	LA (%)	C (%)
1R-23244-B 10/2 1R-21994-B 10/6 1R-21995-B 10/6 1R-21996-B 10/7 1R-21997-B 10/7 1R-21999-B 10/8 1R-22900-B 10/8 1R-23245-B 10/8 1R-23246-B 10/9 1R-23247-B 10/9	0/2/2003 0/6/2003 0/6/2003 0/7/2003 0/7/2003 0/7/2003 0/8/2003 0/8/2003	Field Sample	Parent ID	Surface soil Surface soil	Park	(	Туре	Subsamples	(inches)*	(inches)*	Method	LA Bin	LA (%)	C (%)
1R-21994-B 10/6 1R-21995-B 10/6 1R-21996-B 10/7 1R-21997-B 10/7 1R-21999-B 10/8 1R-21999-B 10/8 1R-22000-B 10/8 1R-23245-B 10/8 1R-23246-B 10/9 1R-23247-B 10/9	0/6/2003 0/6/2003 0/7/2003 0/7/2003 0/7/2003 0/8/2003 0/8/2003	Field Sample Field Sample Field Sample Field Sample Field Sample		Surface soil		Grid 38								
1R-21995-B 10/6 1R-21996-B 10/7 1R-21997-B 10/7 1R-21998-B 10/7 1R-21999-B 10/8 1R-22000-B 10/8 1R-23245-B 10/9 1R-23246-B 10/9 1R-23247-B 10/9	0/6/2003 0/7/2003 0/7/2003 0/7/2003 0/7/2003 0/8/2003	Field Sample Field Sample Field Sample Field Sample			Park		Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-21996-B 10/7 1R-21997-B 10/7 1R-21998-B 10/8 1R-21999-B 10/8 1R-22000-B 10/8 1R-23245-B 10/8 1R-23246-B 10/9 1R-23247-B 10/9	0/7/2003 0/7/2003 0/7/2003 0/7/2003 0/8/2003 0/8/2003	Field Sample Field Sample Field Sample		Surface soil		Grid 37	Composite	5	36	38	PLM-9002	A	ND	ND
1R-21997-B 10/7 1R-21998-B 10/8 1R-21999-B 10/8 1R-22000-B 10/8 1R-23245-B 10/8 1R-23246-B 10/9 1R-23247-B 10/9	0/7/2003 0/7/2003 0/8/2003 0/8/2003	Field Sample Field Sample			Park	Grid 53	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-21998-B 10/7 1R-21999-B 10/8 1R-22000-B 10/8 1R-23245-B 10/8 1R-23246-B 10/9 1R-23247-B 10/9	0/7/2003 0/8/2003 0/8/2003	Field Sample		Surface soil	Park	discretion of the CDM site manager	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-21999-B 10/8 1R-22000-B 10/8 1R-23245-B 10/8 1R-23246-B 10/9 1R-23247-B 10/9	0/8/2003			Surface soil	Park	Grids 34/35	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-22000-B 10/8 1R-23245-B 10/8 1R-23246-B 10/9 1R-23247-B 10/9	0/8/2003			Surface soil	Park	Grid 53	Composite	6	36	38	PLM-9002	B2	< 1	ND
1R-23245-B 10/8 1R-23246-B 10/9 1R-23247-B 10/9		Field Sample		Surface soil	Park	Grid 32	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23246-B 10/9 1R-23247-B 10/9	0/8/2003	Field Sample		Surface soil	Park	Grid 36	Composite	5	12	14	PLM-9002	A	ND	ND
1R-23247-B 10/9		Field Sample		Surface soil	Park	Grid 33	Composite	5	36	38	PLM-9002	A	ND	ND
	0/9/2003	Field Sample		Surface soil	Park	Grid 31	Composite	5	12	14	PLM-9002	Α	ND	ND
	0/9/2003	Field Sample		Surface soil	Park	Grid 30	Composite	5	12	14	PLM-9002	Α	ND	ND
	0/9/2003	Field Sample		Surface soil	Park	south of dirt approach to new boat ramp	Composite	5	12	14	PLM-9002	Α	ND	ND
	/13/2003	Field Sample		Surface soil	Park	Grid 29	Composite	5	12	14	PLM-9002	Α	ND	ND
	/13/2003	Field Sample		Surface soil	Park	Grid 28	Composite	5	12	14	PLM-9002	Α	ND	ND
	/13/2003	Field Sample		Surface soil	Park	Grid 27	Composite	5	36	38	PLM-9002	Α	ND	ND
	/13/2003	Field Sample		Surface soil	Park	Grid 52	Composite	5	36	38	PLM-9002	Α	ND	ND
	/15/2003	Field Sample		Surface soil	Park	Grid 26	Composite	5	12	14	PLM-9002	Α	ND	ND
	/15/2003	Field Sample		Surface soil	Park	Grid 25	Composite	5	12	14	PLM-9002	Α	ND	ND
	/15/2003	Field Sample		Surface soil	Park	Grid 23/24	Composite	5	36	38	PLM-9002	B2	< 1	ND
	/15/2003	Field Sample		Surface soil	Park	Grid 52	Composite	5	36	38	PLM-9002	Α	ND	ND
	/16/2003	Field Sample		Surface soil	Park	Grids 19/20	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23258-B 10/1	/16/2003	Field Sample		Surface soil	Park	Grid 51	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23259-B 10/20	/20/2003	Field Sample		Surface soil	Park	Grid 16	Composite	5	36	38	PLM-9002	Α	ND	ND
1R-23260-B 10/20	/20/2003	Field Sample		Surface soil	Park	Grid 51	Composite	5	36	38	PLM-9002	Α	ND	ND
1R-23741-B 10/20	/20/2003	Field Sample		Surface soil	Park	Grid 13	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23742-B 10/20	/20/2003	Field Sample		Surface soil	Park	Grid 50	Composite	5	36	38	PLM-9002	Α	ND	ND
1R-23743-B 10/20	/20/2003	Field Sample		Surface soil	Park	Grid 10	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23744-B 10/20	/20/2003	Field Sample		Surface soil	Park	Grid 50	Composite	5	36	38	PLM-9002	Α	ND	ND
1R-23745-B 10/22	/22/2003	Field Sample		Surface soil	Park	Grid 49	Composite	5	36	38	PLM-9002	Α	ND	ND
1R-23746-B 10/22	/22/2003	Field Sample		Surface soil	Park	Grid 49	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23751-B 10/23	/23/2003	Field Sample		Surface soil	Park	Grid 7	Composite	5	36	38	PLM-9002	Α	ND	ND
1R-23752-B 10/23	/23/2003	Field Sample		Surface soil	Park	Grid 4	Composite	5	36	38	PLM-9002	Α	ND	ND
1R-23753-B 10/24	/24/2003	Field Sample		Surface soil	Park	Grid 1	Composite	5	30	32	PLM-9002	B2	< 1	ND
1R-23754-B 10/24	/24/2003	Field Sample		Surface soil	Park	Grid 49	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-23755-B 10/2	/27/2003	Field Sample		Surface soil	Park	Grid 2	Composite	5	18	20	PLM-9002	Α	ND	ND
1R-23756-B 10/2	/27/2003	Field Sample		Surface soil	Park	Grid 3	Composite	5	12	14	PLM-9002	Α	ND	ND
1R-23757-B 10/2	/27/2003	Field Sample		Surface soil	Park	Grid 6	Composite	5	12	14	PLM-9002	Α	ND	ND
1R-23758-B 10/2	/27/2003	Field Sample		Surface soil	Park	Grid 5	Composite	5	24	26	PLM-9002	Α	ND	ND
	/28/2003	Field Sample		Surface soil	Park	Grid 9	Composite	5	12	14	PLM-9002	Α	ND	ND
1R-23760-B 10/28	/28/2003	Field Sample		Surface soil	Park	Grid 8	Composite	5	24	26	PLM-9002	Α	ND	ND
	/28/2003	Field Sample		Surface soil	Park	Grid 12	Composite	5	12	14	PLM-9002	Α	ND	ND
	/28/2003	Field Sample		Surface soil	Park	Grid 11	Composite	5	18	20	PLM-9002	Α	ND	ND
	/28/2003	Field Sample		Surface soil	Park	Grid 36	Composite	5	12	14	PLM-9002	Α	ND	ND
	/29/2003	Field Sample		Surface soil	Park	Grid 15	Composite	5	12	14	PLM-9002	Α	ND	ND
	/29/2003	Field Sample		Surface soil	Park	Grid 14	Composite	5	18	20	PLM-9002	A	ND	ND
	/30/2003	Field Sample		Surface soil	Park	Grid 36	Composite	5	12	14	PLM-9002	B2	< 1	ND
	/31/2003	Field Sample		Surface soil	Park	Grid 18	Composite	5	18	20	PLM-9002	A	ND	ND
	/31/2003	Field Sample		Surface soil	Park	Grid 17	Composite	5	18	20	PLM-9002	A	ND	ND
	/31/2003	Field Sample		Surface soil	Park	Grid 22	Composite	5	12	14	PLM-9002	A	ND	ND
	/31/2003	Field Sample		Surface soil	Park	Grid 21	Composite	5	18	20	PLM-9002	A	ND	ND
	1/5/2003	Field Sample		Surface soil	Park	Grid 37	Composite	5	36	38	PLM-9002	B2	< 1	ND
	1/5/2003	Field Sample		Surface soil	Park	Grids 38/42	Composite	5	36	38	PLM-9002	B2	< 1	ND

Table 2-23. Area 2 Removal-related Soil Sample Results – October/November 2003

									Тор	Bottom		Analytical F	Results	
					Sample	Location Description	Sample	Number of	Depth	Depth				
Sample ID	Sample Date	Category	Parent ID	Matrix	Group	(Sub Location)	Type	Subsamples	(inches)*	(inches)*	Method	LA Bin	LA (%)	C (%)
1R-24093-B	11/7/2003	Field Sample		Surface soil	Park	Grids 41/44	Composite	5	36	38	PLM-9002	Α	ND	ND
1R-24094-B	11/7/2003	Field Sample		Surface soil	Park	Grids 46/47/48	Composite	5	24	26	PLM-9002	Α	ND	ND
1R-24096-B	11/11/2003	Field Sample		Surface soil	Park	Grid 39	Composite	5	36	38	PLM-9002	С	2	ND
1R-24097-B	11/11/2003	Field Sample		Surface soil	Park	Grids 43/45	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-24098-B	11/11/2003	Field Sample		Surface soil	Park	Grid 40	Composite	5	12	14	PLM-9002	Α	ND	ND
1R-24099-B	11/13/2003	Field Sample		Surface soil	Park	to proximity to 1R-24096; no visible	Composite	5	36	38	PLM-9002	B2	< 1	ND
1R-24100-B	11/13/2003	Field Sample		Surface soil	Park	sample results; no visible vermiculite	Composite	5	36	38	PLM-9002	B2	< 1	ND

The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

\*Sample depths were recorded in relation to the surface of the excavation rather than in relation to ground surface. Actual excavation and sample depths ranged from 6 to 36 inches below ground surface (refer to Figure 1-6).

B suffix in Sample ID = non-processed sample

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

% = percent

PLM = polarized light microscopy

PLM-9002 = National Institute for Occupational Safety and Health 9002 method

Table 2-24. Area 2 Removal-related Personal Air Sample Results – October/November 2003

Sample ID	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Volume (L)	Sample Date	( NIC	PCM OSH 7400) f/cc
1R-23468	Truck driver-level D	Riverside Park	Vehicle	Shoulder	Air	Outdoor	Personal	Field Sample	484	10/9/2003	C	0.04
1R-23469	Truck driver-level D	Riverside Park	Vehicle	Shoulder	Air	Outdoor	Personal	Field Sample	64	10/9/2003	< 0	0.042
1R-23685	Laborer	Riverside Park	Property	Shoulder	Air	Outdoor	Personal	Field Sample	218	10/20/2003	C	0.015
1R-23686	Level D Truck Driver	Riverside Park	Property	Shoulder	Air	Outdoor	Personal	Field Sample	204	10/20/2003	C	0.041
1R-23688	Level D Truck Driver	Riverside Park	Property	Shoulder	Air	Outdoor	Personal	Field Sample	62	10/20/2003	C	0.12
1R-23689	Level D Truck Driver	Riverside Park	Property	Shoulder	Air	Outdoor	Personal	Field Sample	171	10/20/2003	C	0.067
1R-23690	Laborer	Riverside Park	Property	Shoulder	Air	Outdoor	Personal	Field Sample	202	10/20/2003	< 0	0.013
1R-23691	Level D Truck Driver	Riverside Park	Property	Shoulder	Air	Outdoor	Personal	Field Sample	66	10/20/2003	< 0	0.041

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

OA = Other Amphibole

NIOSH 7400 = National Institute for Occupational Safety and Health method 7400

PCM = phase contrast miscroscopy

f/cc = fibers per cubic centimeter

NIOSH 7400 = National Institute for Occupational Safety and Health method 7400

L = liters

S/cm<sup>2</sup> = Structures per square centimeter

Table 2-25. Area 2 Investigation Surface Soil Sample Results - September 2007

											A	nalytical Re	sults
												PLM-VE	<u> </u>
Sample ID	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (inches)	Bottom Depth (inches)	LA Bin	LA (%)	C (%)
EP-00002	9/12/2007	Field Sample		Surface soil	Property	Riverside park SE of boat ramp	Composite	30	0	3	Α	ND	ND
EP-00009	9/13/2007	Field Sample		Surface soil	Property	Park	Composite	30	0	3	Α	ND	ND
EP-00018	9/14/2007	Field Sample		Surface soil	Property	Riverside park, parking lot	Composite	30	0	3	Α	ND	ND
EP-00019	9/17/2007	Field Sample		Surface soil	Property	Park	Composite	30	0	6	Α	ND	ND
EP-00020	9/17/2007	Field Sample		Surface soil	Property	Park	Composite	30			Α	ND	ND
EP-00021	9/17/2007	Field Sample		Surface soil	Property	Driveway	Composite	30	0	4	Α	ND	ND
EP-00022	9/17/2007	Field Sample		Surface soil	Property	Park	Composite	30	0	6	Α	ND	ND
EP-00023	9/17/2007	Field Sample		Surface soil	Property	Driveway	Composite	30	0	3	A	ND	ND
EP-00024	9/17/2007	Field Sample		Surface soil	Property	Park	Composite	30			Α	ND	ND

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

TR = trace

PLM-VE = visual estimation method

PLM-Grav = gravimetric method

% = percent

Table 2-26. Area 3 Embankment Surface Soil Sample Results - September 2007

											Analytical Results		
												PLM-VE	
Sample ID	Sample Date	Category	Parent ID	Matrix	Sample Group	Location Description (Sub Location)	Sample Type	Number of Subsamples	Top Depth (inches)	Bottom Depth (inches)	LA Bin	LA (%)	C (%)
EP-00003	9/12/2007	Field Sample		Surface soil	Property	Embankment (S.E.)	Composite	30	0	3	Α	ND	ND
EP-00010	9/13/2007	Field Sample		Surface soil	Property	Embankment (S.W.)	Composite	30	0	3	Α	ND	ND
EP-00011	9/13/2007	Field Sample		Surface soil	Property	Embankment (N.W.)	Composite	30	0	3	Α	ND	ND
EP-00016	9/14/2007	Field Sample		Surface soil	Property	Embankment (N.E.)	Composite	30	0	3	Α	ND	ND
EP-00036	9/19/2007	Field Sample		Surface soil	Property	N.W. Embankment; Grid 1	Composite	30	0	6	Α	ND	ND
EP-00037	9/19/2007	Field Sample		Surface soil	Property	N.W. Embankment; Grid 2	Composite	30	0	6	Α	ND	ND
EP-00038	9/19/2007	Field Sample		Surface soil	Property	S.E. Embankment; Grid 2	Composite	30	0	6	Α	ND	ND
EP-00039	9/19/2007	Field Sample		Surface soil	Property	S.E. Embankment; Grid 3	Composite	30	0	6	Α	ND	ND
EP-00041	9/18/2007	Field Sample		Surface soil	Property	Embankment (S.W.)	Composite	30	0	6	Α	ND	ND
EP-00042	9/18/2007	Field Sample		Surface soil	Property	Embankment (S.W.)	Composite	30	0	6	Α	ND	ND
EP-00043	9/18/2007	Field Sample		Surface soil	Property	Embankment (S.W.)	Composite	30	0	6	Α	ND	ND
EP-00044	9/18/2007	Field Sample		Surface soil	Property	Embankment (S.W.)	Composite	30	0	6	Α	ND	ND
EP-00045	9/18/2007	Field Sample		Surface soil	Property	Embankment (S.W.)	Composite	30	0	6	Α	ND	ND
EP-00046	9/18/2007	Field Sample		Surface soil	Property	Embankment	Composite	30	0	6	Α	ND	ND
EP-00047	9/18/2007	Field Sample		Surface soil	Property	Embankment (S.W.)	Composite	30	0	6	B1	TR	ND
EP-00048	9/18/2007	Field Sample		Surface soil	Property	Embankment (S.W.)	Composite	30	0	6	B1	TR	ND
EP-00053	9/19/2007	Field Sample		Surface soil	Property	S.E. Embankment; Grid 1	Composite	30	0	6	Α	ND	ND
EP-00054	9/19/2007	Field Sample		Surface soil	Property	S.E. Embankment; Grid 4	Composite	30	0	6	Α	ND	ND
EP-00062	9/20/2007	Field Sample		Surface soil	Property	N.E. embankment	Composite	30	0	6	B2	< 1	ND
EP-00063	9/20/2007	Field Sample		Surface soil	Property	N.E. embankment	Composite	30	0	6	Α	ND	ND
EP-00064	9/20/2007	Field Sample		Surface soil	Property	N.E. embankment	Composite	30	0	6	Α	ND	ND
EP-00065	9/20/2007	Field Sample	•	Surface soil	Property	S.E. embankment	Composite	30	0	6	Α	ND	ND

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

TR = trace

PLM-VE = visual estimation method

PLM-Grav = gravimetric method

% = percent

Table 2-27. Area 3 Embankment Subsurface Soil Sample Results - September 2007

											Ana	altyical Res	sults
									Тор	Bottom		PLM-VE	
					Sample	Location Description	Sample	Number of	Depth	Depth			
Sample ID	Sample Date	Category	Parent ID	Matrix	Group	(Sub Location)	Type	Subsamples	(inches)	(inches)	LA Bin	LA (%)	C (%)
EP-00069	9/21/2007	Field Sample		Surface soil	Property	Embankment (SW)	Grab		0	24	Α	ND	ND
EP-00070	9/21/2007	Field Sample		Surface soil	Property	Embankment (SW)	Grab		0	24	Α	ND	ND
EP-00071	9/21/2007	Field Sample		Surface soil	Property	Embankment (SW)	Grab		0	24	Α	ND	ND
EP-00072	9/21/2007	Field Sample		Surface soil	Property	Embankment (SW)	Grab		0	24	Α	ND	ND
EP-00073	9/21/2007	Field Sample		Surface soil	Property	Embankment (NW)	Grab		0	24	Α	ND	ND
EP-00074	9/21/2007	Field Sample		Surface soil	Property	Embankment (NW)	Grab		0	24	Α	ND	ND
EP-00075	9/21/2007	Field Sample		Surface soil	Property	Embankment (NW)	Grab		0	24	Α	ND	ND
EP-00076	9/21/2007	Field Sample		Surface soil	Property	Embankment (NE)	Grab		0	24	Α	ND	ND
EP-00077	9/21/2007	Field Sample		Surface soil	Property	Embankment (NE)	Grab		0	24	Α	ND	ND
EP-00078	9/21/2007	Field Sample		Surface soil	Property	Embankment (NE)	Grab		0	24	B1	TR	ND
EP-00079	9/21/2007	Field Sample		Surface soil	Property	Embankment (SE)	Grab		0	24	Α	ND	ND
EP-00080	9/21/2007	Field Sample		Surface soil	Property	Embankment (SE)	Grab		0	24	Α	ND	ND
EP-00081	9/21/2007	Field Sample		Surface soil	Property	Embankment (NE)	Grab		0	24	Α	ND	ND
EP-00082	9/21/2007	Field Sample		Surface soil	Property	Embankment (SW)	Grab		0	24	B1	TR	ND
EP-00083	9/21/2007	Field Sample		Surface soil	Property	Embankment (SW)	Grab		0	24	Α	ND	ND

The report excludes all lab quality control results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

LA = Libby Amphibole

C = Chrysotile

ND = non-detect

TR = trace

PLM-VE = visual estimation method

PLM-Grav = gravimetric method

% = percent

Table 6-1 Exposure Parameters Based on Site-Survey

Receptor	Exposure	Activity	ET (hr	s/day)	EF (d	ays/yr)	TWF		
Group	Location	Pattern	CTE	RME	CTE	RME	CTE	RME	
Search/Rescue	Indoors	Active	0.6	1	72	300	0.0053	0.0341	
Volunteers		Passive	1	2	72	300	0.0096	0.0618	
	Outdoors	Active	0.5	0.8	72	300	0.0045	0.0288	
		Passive	0.2	0.4	72	300	0.0019	0.0123	
	Outdoors	Active	0.15	0.17	150	245	0.0026	0.0048	
Fishing Guides		Passive	0.15	0.17	150	245	0.0026	0.0048	

Receptor	Age at	t Start	Exp. Du	r. (yrs)	IUR		
Group	CTE	RME	CTE	RME	CTE	RME	
Search/Rescue	40	20	30	50	0.0288	0.0871	
Fishing Guides	25	20	40	50	0.0659	0.0871	

**Table 6-2 Exposure Parameters Based on Professional Judgement** 

Receptor	Exposure	Activity	ET (hrs	s/day)	EF (d	ays/yr)	TWF	
Group	Location	Pattern	CTE	RME	CTE	RME	CTE	RME
Recreational Visitors	Outdoors	Active	0.5	1	25	50	0.0014	0.0057
		Passive	2	4	25	50	0.0057	0.0228
City Workers	Outdoors	Active	2	4	219	250	0.0500	0.1142
		Passive	1	1	219	250	0.0250	0.0285
Future Commercial	Outdoors	Active	4	7	219	250	0.1000	0.1998
Workers		Passive	4	1	219	250	0.1000	0.0285
Future Construction	Outdoors	Active	7	7	100	200	0.0799	0.1598
Workers		Passive	1	1	100	200	0.0114	0.0228

Receptor	Age at	t Start	Exp. Du	ır. (yrs)	IUR		
Group	CTE	RME	CTE	RME	CTE	RME	
Recreational Visitors	0	0	9	30	0.0779	0.1726	
City Workers	20	20	10	25	0.0388	0.0690	
Commercial Workers	20	20	10	25	0.0388	0.0690	
Construction Workers	20	20	1	5	0.0049	0.0220	

## Acronyms:

ET = Exposure time

EF = Exposure frequency

TWF = Time-weighting factor

CTE = Central tendency exposure

RME = Reasonable maximum exposure

IUR = Inhalation unit risk

Table 6-3
Outdoor Ambient Air Data

Location		centration /IE s/cc)
	Mean	Maximum
OU4-North	7.00E-06	1.13E-04
OU4-East	9.22E-06	1.49E-04
OU4-Central	3.75E-06	5.40E-04
OU4-South	2.54E-06	7.98E-05
OU2	2.27E-06	3.99E-05
OU6	8.59E-06	2.25E-04

Source: USEPA (2009)

# Acronyms:

LA = Libby amphibole OU = Operable Unit

PCME = Phase contrast microscopy equivalent

Table 6-4
Evaluation of Cancer Risks from Passive Exposure to Outdoor Ambient Air

Panel A: Best Estimate

Receptor	EPC(mean)	TV	VF	IL	JR .	Risk		
Group	PCME s/cc	CTE	RME	CTE	RME	CTE	RME	
Search/Rescue	7.0E-06	0.0019	0.0123	0.0288	0.0871	4E-10	8E-09	
Fishing Guides	7.0E-06	0.0026	0.0048	0.0659	0.0871	1E-09	3E-09	
Recreational Visitor	7.0E-06	0.0057	0.0228	0.0779	0.1726	3E-09	3E-08	
City Worker	7.0E-06	0.0250	0.0285	0.0388	0.0690	7E-09	1E-08	
Commercial Worker	7.0E-06	0.1000	0.0285	0.0388	0.0690	3E-08	1E-08	
Construction Worker	7.0E-06	0.0114	0.0228	0.0049	0.0220	4E-10	4E-09	

Panel B: Upper Bound

Receptor	EPC(max.)	TV	VF	IL	JR	Ri	sk
Group	PCME s/cc	CTE	RME	CTE	RME	CTE	RME
Search/Rescue	1.1E-04	0.0019	0.0123	0.02885	0.08714	6E-09	1E-07
Fishing Guides	1.1E-04	0.0026	0.0048	0.06586	0.08714	2E-08	5E-08
Recreational Visitor	1.1E-04	0.0057	0.0228	0.07794	0.17261	5E-08	4E-07
City Worker	1.1E-04	0.0250	0.0285	0.03880	0.06905	1E-07	2E-07
Commercial Worker	1.1E-04	0.1000	0.0285	0.03880	0.06905	4E-07	2E-07
Construction Worker	1.1E-04	0.0114	0.0228	0.00488	0.02198	6E-09	6E-08

# Acronyms:

TWF = Time weighting factor

IUR = Inhalation unit risk

CTE = Central tendency exposure

RME = Reasonable maximum exposure

EPC = Exposure point concentration

PCME = Phase contrast microscopy equivalent

Table 6-5
Indoor Personal Air Data at the Search and Rescue Facility

	Activity	Sensitivity	Total LA	Total LA	PCME LA
Location	Level	(cc)-1	Count	Conc. (s/cc)	Conc. (s/cc)
Garage	Active	7.1E-03	3	2.1E-02	7.1E-03
Garage	Active	2.7E-03	1	2.7E-03	0.0E+00
Garage	Active	8.5E-03	5	4.2E-02	2.5E-02
Garage	Active	2.4E-02	0	0.0E+00	0.0E+00
Garage	Active	1.2E-02	1	1.2E-02	0.0E+00
Garage	Active	4.9E-03	5	2.5E-02	0.0E+00
Garage	Active	1.8E-02	0	0.0E+00	0.0E+00
Garage	Active	7.0E-03	10	7.0E-02	2.8E-02
Garage	Active	4.6E-03	1	4.6E-03	0.0E+00
Garage	Active	4.2E-03	2	8.3E-03	0.0E+00
Garage	Active	7.7E-03	0	0.0E+00	0.0E+00
Garage	Active	5.1E-03	4	2.1E-02	0.0E+00
Garage	Active	1.9E-02	1	1.9E-02	1.9E-02
Garage	Active	1.4E-02	2	2.8E-02	0.0E+00
Garage	Active	1.9E-02	1	1.9E-02	0.0E+00
Garage	Active	1.7E-02	0	0.0E+00	0.0E+00
Meeting room	Active	2.7E-04	4	1.1E-03	8.0E-04
Meeting room	Active	9.8E-04	9	8.8E-03	3.9E-03
Meeting room	Active	2.9E-04	8	2.3E-03	8.8E-04
Meeting room	Passive	3.0E-04	1	3.0E-04	0.0E+00
Meeting room	Passive	2.6E-04	3	7.9E-04	5.3E-04
Meeting room	Passive	2.8E-04	1	2.8E-04	2.8E-04

Results are based on a download of the Libby2 database performed on 4-14-09.

# **Summary Statistics**

Activity	PCMI	E s/cc	
Level	Mean	Max	
Active	4.5E-03	2.8E-02	
Passive	2.7E-04	5.3E-04	

## Acronyms:

cc = cubic centimeters

LA = Libby amphibole

PCME = Phase contrast microscopy equivalent

Table 6-6
Evaluation of Cancer Risks from Exposure to Indoor Air

Panel A: Best Estimate

Receptor	Activity	EPC(mean)	TWF		IUR		Risk	
Group	Level	PCME s/cc	CTE	RME	CTE	RME	CTE	RME
	Active	4.5E-03	0.00533	0.0341	0.0288	0.0871	7E-07	1E-05
Search and Rescue	Passive	2.7E-04	0.00963	0.0618	0.0288	0.0871	7E-08	1E-06
i ve soue	Total						8E-07	1E-05

Panel B: Upper Bound

Receptor	Activity	EPC(max.)	TV	/F	IU	R	Ri	sk
Group	Level	PCME s/cc	CTE	RME	CTE	RME	CTE	RME
0	Active	2.8E-02	0.0053	0.0341	0.0288	0.0871	4E-06	8E-05
Search and Rescue	Passive	5.3E-04	0.0096	0.0618	0.0288	0.0871	1E-07	3E-06
Rescue	Total						4E-06	9E-05

# Acronyms:

TWF = Time weighting factor

IUR = Inhalation unit risk

CTE = Central tendency exposure

RME = Reasonable maximum exposure

EPC = Exposure point concentration

PCME = Phase contrast microscopy equivalent

Table 6-7
Outdoor Air Data from Soil Disturbances

Activity	Sensitivity (cc)-1	Total LA Count	Total LA Conc. (s/cc)	PCME LA Conc. (s/cc)
Mowing / Brush-hogging	1.9E-03	2	3.8E-03	3.8E-03
Mowing / Brush-hogging	4.6E-03	1	4.6E-03	4.6E-03
Mowing / Brush-hogging	1.5E-03	0	0.0E+00	0.0E+00
Mowing / Brush-hogging	4.3E-03	1	4.3E-03	0.0E+00
Mowing / Brush-hogging	2.0E-03	35	7.2E-02	5.7E-02
Mowing / Brush-hogging	4.6E-03	1	4.6E-03	0.0E+00
Mowing / Brush-hogging	1.1E-03	8	8.9E-03	5.6E-03
Mowing / Brush-hogging	3.1E-03	0	0.0E+00	0.0E+00

Results are based on a download of the Libby2 database performed on 4-14-09.

**Summary Statistics** 

Activity	N	PCME Co	onc. (s/cc)
Activity	14	Mean	Maximum
Mowing / Brush-hogging	8	8.9E-03	5.7E-02

Note: Data were collected after application of water to suppress dust release.

### Acronyms:

cc = cubic centimeters

LA = Libby amphibole

PCME = Phase contrast microscopy equivalent

s/cc = Structures per cubic centimeter

N = Number of samples

Table 6-8
Evaluation of Cancer Risks from Outdoor Activities that Disturb Soil

Panel A: Best Estimate

Receptor	EPC(mean)	TV	VF	IU	R	Ri	sk
Group	PCME s/cc	CTE	RME	CTE	RME	CTE	RME
Search/Rescue	8.9E-03	0.0045	0.0288	0.0288	0.0871	1E-06	2E-05
Fishing Guides	8.9E-03	0.0026	0.0048	0.0659	0.0871	2E-06	4E-06
Recreational Visitor	8.9E-03	0.0014	0.0057	0.0779	0.1726	1E-06	9E-06
City Worker	8.9E-03	0.0500	0.1142	0.0388	0.0690	2E-05	7E-05
Commercial Worker	8.9E-03	0.1000	0.1998	0.0388	0.0690	3E-05	1E-04
Construction Worker	8.9E-03	0.0799	0.1598	0.0049	0.0220	3E-06	3E-05

Panel B: Upper Bound

Receptor	EPC(max)	TV	VF	IU	R	Ri	sk
Group	PCME s/cc	CTE	RME	CTE	RME	CTE	RME
Search/Rescue	5.7E-02	0.0045	0.0288	0.0288	0.0871	7E-06	1E-04
Fishing Guides	5.7E-02	0.0026	0.0048	0.0659	0.0871	1E-05	2E-05
Recreational Visitor	5.7E-02	0.0014	0.0057	0.0779	0.1726	6E-06	6E-05
City Worker	5.7E-02	0.0500	0.1142	0.0388	0.0690	1E-04	5E-04
Commercial Worker	5.7E-02	0.1000	0.1998	0.0388	0.0690	2E-04	8E-04
Construction Worker	5.7E-02	0.0799	0.1598	0.0049	0.0220	2E-05	2E-04

# Acronyms:

TWF = Time weighting factor

IUR = Inhalation unit risk

CTE = Central tendency exposure

RME = Reasonable maximum exposure

EPC = Exposure point concentration

PCME = Phase contrast microscopy equivalent

Table 7-1. Preliminary List of Chemical and Location Specific Federal and State Applicable or Relevant and Appropriate Requirements (ARARs)

Statue and Regulatory Citation	ARAR Determination	Description	Comment	Chemical	Location				
Federal ARARs									
National Historic Preservation Act (NHPA), 16 U.S.C. ' 470 40 CFR 6.301(b) 36 CFR 60, 63, 800	Applicable	This statute and implementing regulations require federal agencies to take into account the effect of this response action upon any district, site, building, structure, or object that is included in or eligible for the National Register of Historic Places.	If cultural resources on or eligible for the national register are present, it will be necessary to determine if there will be an adverse effect and if so how the effect may be minimized or mitigated.  The unauthorized removal of		<b>√</b>				
Archaeological and Historic Preservation Act 16 U.S.C. ' 469 40 CFR 6.301(c) 43 CFR 7	Applicable	This statute and implementing regulations establish requirements for the evaluation and preservation of historical and archaeological data, which may be destroyed through alteration of terrain as a result of a federal construction project or a federally licensed activity or program.	The unauthorized removal of archaeological resources from public or Indian lands is prohibited without a permit, and any archaeological investigations at a site must be conducted by a professional archaeologist.  If any remedial action activities are necessary beyond permitted, SHPO consultation and NHPA compliance will be addressed during remedial design.		<b>√</b>				
Fish and Wildlife Coordination Act 16 U.S.C. '' 661, et seq., 40 CFR 6.302(g) 50 CFR 83 33 CFR 320-330	Applicable	This statute and implementing regulations require coordination with federal and state agencies for federally funded projects to ensure that any modification of any stream or other water body affected by any action authorized or funded by the federal agency provides for adequate protection of fish and wildlife resources.	If the remedial action involves activities that affect wildlife and/or non-game fish, federal agencies must first consult with the U.S. Fish and Wildlife Service and the relevant state agency with jurisdiction over wildlife resources.		<b>√</b>				
Endangered Species Act, 16 U.S.C. · 1531 40 CFR 6.302(h) 50 CFR 17 and 402	Relevant and Appropriate	This statute and implementing regulations provide that federal activities not jeopardize the continued existence of any threatened or endangered species. Endangered Species Act, Section 7 requires consultation with the U.S. Fish and Wildlife Service to identify the possible presence of protected species and mitigate potential impacts on such species.	If threatened or endangered species are identified within the remedial areas, activities must be designed to conserve the species and their habitat. To date no threatened or endangered species have been identified in the area of the site.		<b>√</b>				



Statue and Regulatory Citation	ARAR Determination	Description	Comment	Chemical	Location					
	Federal ARARs									
Migratory Bird Treaty Act, 16 U.S.C. ' ' 703, et seq. 50 CFR 10.13	Relevant and Appropriate	This requirement establishes a federal responsibility for the protection of the international migratory bird resource and requires continued consultation with the U.S. Fish and Wildlife Service during remedial design and remedial construction to ensure that the cleanup of the site does not unnecessarily impact migratory birds.	The selected remedial actions will be carried out in a manner to avoid adversely affecting migratory bird species, bald eagle and including individual birds or their nests.		<b>√</b>					
Clean Air Act (CAA) 42 U.S.C. ' 7401, et seq. 40 CFR 61, Subpart M (delegated to the state and incorporated by reference at ARM 17.8.341)	Applicable	National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Asbestos	The selected remedial actions will be carried out in a manner that will comply with all the National Emission Standard for Asbestos as required under NESHAP.	✓						
Clean Air Act (CAA) Air Cleaning 40 CFR 61.152 Note: Section 61.152(b)(3) is not delegated to the State	Relevant and Appropriate	This requirement establishes detailed specifications for air cleaning used as part of a system to control asbestos emissions control system.	These requirements would be applicable if air cleaning is part of the building demolitions. It would be relevant and appropriate to other air cleaning operations.	<b>√</b>						
Clean Air Act (CAA) Air Cleaning 40 CFR 61.155	Relevant and Appropriate	This requirement establishes detailed standards for operations that convert asbestos containing waste material into non-asbestos (asbestos-free) material.	These requirements would be applicable if the remedial action includes any treatment of asbestos containing material.	<b>√</b>						



Statue and Regulatory Citation	ARAR Determination	Description	Comment	Chemical	Location						
	State of Montana ARARs										
Montana Asbestos Control Act ARM 17.8.204 ARM 17.8.206	Relevant and Appropriate	Ambient Air Monitoring & Ambient Air Methods and Data: Require that all ambient air monitoring, sampling and data collection, recording, analysis and transmittal shall be in compliance with the Montana Quality Assurance Manual except when more stringent requirements are determined to be necessary.	These requirements will be followed unless an equivalent or more stringent approach is deemed appropriate.	✓							
Montana Asbestos Control Act ARM 17.8.220 ARM 17.8.223	Applicable	Ambient air quality standard for settled particulate matter. Particulate matter concentrations in the ambient air shall not exceed the following 30-day average: 10 grams per square meter.  Ambient air quality standards for PM-10. PM-10 concentrations in the ambient air shall not exceed the following standards: 150 micrograms/cubic meter of air, 24-hour average; and 50 micrograms/cubic meter of air, expected annual average.	The removal action will involve significant soil disturbance. Particulate/dust levels will need to be controlled.  Each of the ambient air quality standards includes specific requirements and methodologies for monitoring and detection. These requirements will be followed unless an equivalent or more stringent approach is deemed appropriate.	✓							
Montana Asbestos Control Act ARM 17.8.304	Applicable	Visible Air Contaminants. No source may discharge emissions into the atmosphere that exhibit opacity of 20 percent or greater, averaged over six consecutive minutes. This standard is limited to point sources, but excludes wood waste burners, incinerators, and motor vehicles.	No visible emissions are anticipated.	<b>√</b>							
Montana Asbestos Control Act ARM 17.8.308	Applicable	Airborne Particulate Matter. Emissions of airborne particulate matter from any stationary source shall not exhibit opacity of 20 percent or greater, averaged over six consecutive minutes.	This standard applies to the production, handling, transportation, or storage of any material; to the use of streets, roads, or parking lots; and to construction or demolition projects.	<b>√</b>							
Montana Asbestos Control Act ARM 17.8.315	Relevant and Appropriate	Odors. If a business or other activity will create odors, those odors must be controlled, and no business or activity may cause a public nuisance.	Action is not expected to produce nuisance level odors.	<b>√</b>							

Statue and Regulatory Citation	ARAR Determination	Description	Comment	Chemical	Location
		State of Montana A	RARs		
Montana Water Quality Control Act ARM 17.30.637	Applicable	It states that no waste may be discharged and no activities conducted which, either alone or in combination with other waste activities, will cause violation of surface water quality standards; provided a short term exemption from a surface water quality standard may be authorized by the department for Aemergency remediation activities@ under the conditions specified in ' 75-5-308, MCA.		✓	
Montana Water Quality Control Act ARM 17.30.705	Applicable	Requires that for any surface water, existing and anticipated uses and the water quality necessary to protect these uses must be maintained and protected unless degradation is allowed under the nondegradation rules at ARM 17.30.708.		✓	
Montana Asbestos Control Act ARM 17.74.351 ARM 17.74.365	Applicable	Adopts and incorporates by reference 40 CFR subparts A and M (NESHAP) for asbestos, and the National Institute of Occupational Safety and Health (NIOSH) Manual of Analytical Methods for detecting asbestos by phase contrast microscopy (PCM) and a description of the 7402 Analytical Method for detecting asbestos by transmission electron microscopy (TEM).  It requires that training for asbestos workers, supervisors, inspectors, project management planners, and project designers meet requirements of 40 CFR 763, subpart E, Appendix C (Asbestos Model Accreditation Plan).		<b>√</b>	



Statue and Regulatory Citation	ARAR Determination	Description	Comment	Chemical	Location
		State of Montana A	RARs		
The Montana Asbestos Control Manual	Applicable	The Montana Asbestos Control Manual (the Manual) is adopted and incorporated by reference in ARM Title 17, Chapter 74, Subchapter 3. The Manual identifies practices and procedures for inspecting for asbestos, conducting asbestos projects, and clearing asbestos projects. The Montana Department of Environmental Quality administers NESHAP through its asbestos control program. The NESHAP contains standards that regulate building demolitions, renovations, asbestos disposal sites, and other sources of asbestos emissions.		<b>√</b>	
Montana Code Annotated (MCA), Montana Floodplain and Floodway Management Act and Regulations, ARM 36.15.601 et seq. MCA 76-5-401 et seq.	Relevant and Appropriate	The Floodplain and Floodway Management Act and regulations specify types of uses and structures that are allowed or prohibited in the designated 100-year floodway and floodplain. Libby OU2 is adjacent to the Kootenai River, and these standards are relevant to all actions within the floodplain.	The Screening Plant is presumed to be outside the 100 year flood plain.  No solid waste disposal will occur within the floodway or floodplain.		<b>✓</b>
Montana Code Annotated (MCA), Montana Antiquities Act, MCA 22-3-421, et seq.	Relevant and Appropriate	Montana Antiquities Act addresses the responsibilities of State agencies regarding historic and prehistoric sites including buildings, structures, paleontological sites, archaeological sites on state owned lands. Each State agency is responsible for establishing rules regarding historic resources under their jurisdiction which address National Register eligibility, appropriate permitting procedures and other historic preservation goals. The State Historic Preservation Office maintains information related to the responsibilities of State Agencies under the Antiquities Act.			<b>√</b>
Montana Code Annotated (MCA), Montana Human	Applicable	The Human Skeletal Remains and Burial Site Protection Act is the result of years of			✓



Statue and Regulatory Citation	ARAR Determination	Description	Comment	Chemical	Location
		State of Montana A	ARARs		
Skeletal Remains and Burial Site Protection Act (1991), MCA 22-3-801 et seq.		work by Montana Tribes, State agencies and organizations interested in ensuring that all graves within the State of Montana are adequately protected. If human skeletal remains or burial sites are encountered during remedial activities within OU2 of the Libby Asbestos Site, then these requirements will be applicable.			
Montana Code Annotated (MCA), Local Air Pollution Control Program MCA 75-3-301	Applicable	The provisions of the Lincoln County Air Pollution Control Program, approved by Montana DEQ pursuant to § 75-2-301, MCA and administered by Lincoln County, are designed to regulate activities within a designated Air Pollution Control District to achieve and maintain such levels of air quality as will protect human health and safety and, to the greatest degree practicable, prevent injury to plant and animal life and property, and facilitate the enjoyment of the natural attractions of Lincoln County.			<b>√</b>
Montana Code Annotated (MCA) MCA 75-5-605	Applicable	Prohibits the causing of pollution of any state waters. Section 75-5-103(21)(a)(i) defines pollution as contamination or other alteration of physical, chemical, or biological properties of state waters which exceeds that permitted by the water quality standards. States that it is unlawful to place or cause to be placed any wastes where they will cause pollution of any state waters. Any permitted placement of waste is not placement if the agency's permitting authority contains provisions for review of the placement of materials to ensure it will not cause pollution to state waters.	These requirements would be triggered only in the event that the removal action impacts surface of groundwater. Excavation may take place close to the Kootenai River. Precautions will need to be put into place to prevent accidental release of asbestos containing soils into the river. May also be applicable if disposal of RACM occurs on-site.		<b>√</b>



Statue and Regulatory Citation	ARAR Determination	Description	Comment	Chemical	Location								
State of Montana ARARs													
Montana Code Annotated (MCA) MCA 87-5-502 and 504	Applicable	Provide that a state agency or subdivision shall not construct, modify, operate, maintain or fail to maintain any construction project or hydraulic project which may or will obstruct, damage, diminish, destroy, change, modify, or vary the natural existing shape and form of any stream or its banks or tributaries in a manner that will adversely affect any fish or game habitat. The requirement that any such project must eliminate or diminish any adverse effect on fish or game habitat is applicable to the state in approving remedial actions to be conducted. The Natural Streambed and Land Preservation Act of 1975, MCA ' 75-7-101, et seq., (Applicable substantive provisions only) includes similar requirements and is applicable to private parties as well as government agencies.	Consultation with the Montana Department of Fish, Wildlife and Parks, and any conservation district or board of county commissioners (or consolidated city/county government) is encouraged during the designing and implementing of the remedial action for OU2 of the Libby Asbestos Site.		✓								



# Appendix A Asbestos Sampling Results for Fill Material Used at Operable Unit 1

# Appendix A - Asbestos Sampling Results for Fill Material Used at Operable Unit 1 Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Different, Verified Analysis, etc.

										·LM	
Sample ID	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Sample Date	Method	LA Bin	LA (	%) C (%)
1R-02683	Plum Creek Pit	Property	Plum Creek Pit	Soil-Like	Fill	Field Sample	10/10/2000	PLM-9002	А	ND	ND
1R-14476	Plum Creek Pit	Borrow Source	Borrow source	Soil-Like	Fill	Field Sample	9/4/2002	PLM-9002	Α	ND	ND
1R-14477	Plum Creek Pit	Borrow Source	Borrow source	Soil-Like	Fill	Field Sample	9/4/2002	PLM-9002	Α	ND	ND
1R-14478	Plum Creek Pit	Borrow Source	Borrow source	Soil-Like	Fill	Field Sample	9/4/2002	PLM-9002	Α	ND	ND
1R-14479	Plum Creek Pit	Borrow Source	Borrow source	Soil-Like	Fill	Field Sample	9/4/2002	PLM-9002	Α	ND	ND
1R-14480	Plum Creek Pit	Borrow Source	Borrow source	Soil-Like	Fill	Field Sample	9/4/2002	PLM-9002	Α	ND	ND
1R-21981-B	Boothman Pit	Borrow Source	Boothman fill pit, 9000 to 12000 cu yds	Soil-Like	Fill	Field Sample	7/30/2003	PLM-9002	Α	ND	ND
1R-21358-B	Boothman Pit	Borrow Source	Boothman Fill Pit; 12,000 to 15,000 cu yds	Soil-Like	Fill	Field Sample	7/30/2003	PLM-9002	Α	ND	ND
1R-21359-B	Boothman Pit	Borrow Source	Boothman fill pit; 15,000 to 18,000 cu. yds	Soil-Like	Fill	Field Sample	7/30/2003	PLM-9002	Α	ND	ND
1R-21360-B	Boothman Pit	Borrow Source	Boothman fill pit; 18,000 to 21,000 cu. yds	Soil-Like	Fill	Field Sample	7/30/2003	PLM-9002	Α	ND	ND

# Appendix B Personal and Stationary Air Monitoring Data Collected During OU1 Removal and Response Activities as of April 27, 2007

Annendiy	R - Personal and Stationary	ν Air Monitoring Γ	Data Collected Duri	ing OU1 Removal and Response Activi	tipe as of A	nril 27 200	7																					
Note: The	report excludes all Lab QC resul	ts, such as those asso	ociated with Lab Blan	ks, Lab Duplicates, Re-Preparation, Re-count	Same, Re-co	unt Differen	, Verified An	alysis, etc.									ISO	Concentrations (A	ir = structures		ures/cm²) (METHOD	- ISO 10312)						
												Exc		Lit led Structures	by Amphiboles Structures De			E	Excluded Stru		rysotile ( C ) Structures Detected		Exc	cluded Struct		Amphiboles ( OA ) Structures Detect		
Sample ID					Media Type																							
	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)		Matrix	Sample Type	Category		Vol (air=L)/ rea (dust=cm²)	Sample Date Grid Ope ings			Length < Dia- Ler 0.5 u meter > 0.5 0.5u	to 5 u to 10 u	5 Length 10 u	h > Total Conc. LA	Total Aspect	ct Length < < 0.5 u	Dia- Lengt meter > 0.5 to 0.5u	h Length 5 Leng 5 u to 10 u 10 u		Total Aspect ount C Ratio - 5:1	t Length [ < < 0.5 u r	Dia- Lengtl meter > 0.5 to 0.5u	h Length 5 Le 5 u to 10 u 10	ength > Total 0 u Conc. OA	
1-00802		Export Plant	Lumber Yard	FIELD FIELD	Air	Outdoor	Stationary	Field Sample	N/A	2256	4/4/2000 3	0	0	0 0	0.0011 0.00	11	0 0.002	3 4	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1-00809 1-00809 1-01308		Export Plant Export Plant Export Plant	Lumber Yard Lumber Yard Lumber Yard	FIELD FIELD	Air Air Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A N/A N/A	5040 5040 4344		0	0	0 0	0.0001	0	0 0.000	1 1	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1-01308 1R-00039	sweep in the plainer breakroom at millwork	Export Plant	Lumber Yard Lumber Yard	FIELD Left Shoulder	Air	Outdoor	Stationary Personal	Field Sample Field Sample	N/A N/A	4344 417	4/9/2000 7	0	0		0.0003 0.000 0.3235	01	0 0.000	5 5	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
	west.  Working in Bag House - moving bags of	Export Plant	Lumber Yard	Left Shoulder	Air	Indoor	Personal	Field Sample	N/A	399		0	0		0.5071 0.507	71 0.3	3381 2.366	6 14	0	0 0	0 0	0 0	0	0 0	0	0	0 0	0 0
1R-04432	insulation and sweep floor, Millwork West.	303 W. Thomas St	Warehouse	Large warehouse inside horizontal surfaces	Dust	Building		Field Sample	N/A	100	4/19/2001 1	0	0		0	0			0				0	0 0	0			
1R-04433 1R-06893		303 W. Thomas St 303 W. Thomas St	Warehouse Property	Large warehouse inside foundation  Center of room	Dust	Building	Stationary	Field Sample	N/A N/A	100 100 1233	4/19/2001 1	0	0	0 0 0	0 169,83 0 0.015		0 169,83 0051 0.025		0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-07101	Hepa vacuum Hepa vacuum	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Indoor	Personal Personal	Field Sample	N/A N/A	479 480	8/4/2001 1	0	0	0 0	0	0	0 0.023	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-07381 1-03542	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	303 W. Thomas St 303 W. Thomas St	Planer Building Property	Planer Bldg. Small shed	Air Dust	Indoor Building	Stationary	Field Sample	N/A N/A	1242 300	8/7/2001 1	0	0	0 0 0 26,800	70.655 19.49	0	0 129.12	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1-03543 1-03544		303 W. Thomas St 303 W. Thomas St	Pole Barn Property	Pole barn Connex. Box #1	Dust Dust	Building Building		Field Sample	N/A N/A	300 300	8/28/2001 1	0	6,091 0		67,000 12,18 14,618 2,43		0 19,45	5 16 1 8	0		,091 0 ,436 0	0 6,091 0 2,436	1	0 0	0	0 0	0 0	0 0
1-03545 1R-09059		303 W. Thomas St 303 W. Thomas St	Property EXP-2	Connex. Box #2 EXP-2	Dust Air	Building Outdoor	Stationary		N/A N/A	300 3512	9/5/2001 1	0	2,436 0	0 3,045 0 0	30,455 3,65 0.0011	55 0	609 40,200 0 0.001	0 66 1 1	0	0 0 1	,827 0 0 0	0 1,827 0 0	3	0 0	0	0 0	0 0	0 0
1R-09060 1R-09082		303 W. Thomas St 303 W. Thomas St	WRGrace EXP-5	EXP-3 EXP-5	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	3447 3192	9/5/2001 1	0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
	Labor - Removing roof	303 W. Thomas St 303 W. Thomas St	EXP-6 Property	EXP-6 Shoulder	Air Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A N/A	3298 710	9/5/2001 1	0	0 0.0054	0 0 0 0.0488	0 0.0163	0 0.0	0 0054 0.075	0 0	0	0 0	0 0	0 0	0	0 0	0 0.0	0 0 0054 0	0 0 0 0.0054	0 i4 1
1R-09961 1R-09962		303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	2490 2510	9/6/2001 1	0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-09963 1R-09964		303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	2485 2538	9/6/2001 1	0	0	0 0	0 0.0014	0	0 0.001	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-09965 1R-09966		303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	2513 2508	9/6/2001 1	0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
	Decon roof  Decon roof	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A N/A	612 50	9/6/2001 1	0	0	0 0.0057 0 0	0.0229 0.005	57 0	0 0.034	6 0	0	0 0.0	0057 0	0 0.0057	0	0 0	0	0 0	0 0	0 0
	Operate - Excavator	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Lumber/ Export Plant Shoulder	Dust Air	Unknown N/A	Personal	Field Sample Field Sample	N/A N/A	300 700	9/7/2001 1	0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-09979 1R-10042 1R-10043	Operate - Excavator	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property EXP-2	Shoulder EXP-2 EXP-3	Air	Outdoor Outdoor Outdoor	Personal Stationary		N/A N/A	66 1355	9/7/2001 1	0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10045 1R-10081		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	WRGrace EXP-5 EXP-1	EXP-5 EXP-1	Air Air Air	Outdoor Outdoor	Stationary Stationary		N/A N/A	1170 1030 2787	9/7/2001 1	0 0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10081 1R-10082 1R-10083		303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2 WRGrace	EXP-2 EXP-3	Air Air	Outdoor	Stationary Stationary Stationary		N/A N/A	2782 2723	9/10/2001 1	0	0	0 0	0.0013	0	0 0.001	3 1	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10085 1R-10089	Spray down	303 W. Thomas St 303 W. Thomas St	EXP-5 Property	EXP-5 Shoulder	Air	Outdoor Outdoor	Stationary Personal	Field Sample		2121 765	9/10/2001 1	0	0	0 0.0017	0	0	0 0.001	7 1	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
	Spray down	303 W. Thomas St 303 W. Thomas St	Property EXP-1	Shoulder EXP-1	Air	Outdoor Outdoor	Personal Stationary	Field Sample	N/A N/A	46 1927	9/10/2001 1	0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10142 1R-10143		303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace	EXP-2 EXP-3	Air	Outdoor Outdoor	Stationary Stationary	Field Sample	N/A N/A	1871 1833	9/11/2001 1	0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10144 1R-10145		303 W. Thomas St 303 W. Thomas St	EXP-4 EXP-5	EXP-4 EXP-5	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample	N/A N/A	1828 1818		0	0	0 0	0	0	0 0	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10146 1R-10147		303 W. Thomas St 303 W. Thomas St	EXP-6 EXP-7	EXP-6 EXP-7	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1088 1803		0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10152	Removing sheet metal	303 W. Thomas St 303 W. Thomas St	Property Clean Room	Shoulder EXP-decon (clean room)	Air Air	Outdoor Indoor	Personal Stationary	Field Sample	N/A N/A	737 1969	9/11/2001 1	0	0	0 0 0 0.0018	0	0	0 0.001		0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10153 1R-10156		303 W. Thomas St 303 W. Thomas St	NAFU EXP-1	EXP-NAFU EXP-1	Air Air	Indoor Outdoor	Stationary Stationary	Field Sample	N/A N/A	1906 1332	9/12/2001 1	0	0	0 0	0 0.004	41 0	0 0.004	1 2 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10157 1R-10157		303 W. Thomas St 303 W. Thomas St	EXP-2 EXP-2	EXP-2 EXP-2	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1310 1310	9/12/2001 4	.0	0	0 0	0.0007	0	0 0.000	0 7 1	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10157 1R-10158 1R-10159		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace EXP-4	EXP-2 EXP-3 EXP-4	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A N/A	1310 1304	9/12/2001 1	0	0	0 0 0 0 0 0.0026	0.0009	0	0 0.000	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10159 1R-10161 1R-10162		303 W. Thomas St 303 W. Thomas St	EXP-4 EXP-6 FXP-7	EXP-4 EXP-6 EVP-7	Air Air Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A N/A	1324 1286 1321		0	0	0 0.0026	0	0	0 0.002	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10162 1R-10163		303 W. Thomas St 303 W. Thomas St	EXP-7 EXP-7 Planer Building	EXP-7 B/W Planer/longshed	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample Field Sample	N/A N/A	1321 1321 1404	9/12/2001 1	0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10164 1R-10167		303 W. Thomas St 303 W. Thomas St	Planer Building Property	B/W Planer/longshed Shoulder	Air	Indoor	Stationary Personal	Field Sample	N/A N/A	1398 690	9/12/2001 1	0	0	0 0	0	0	0 0	0 0	0	0 0	0 0	0 0 0	0	0 0	0	0 0	0 0	0 0
1R-10170 1R-10171		303 W. Thomas St 303 W. Thomas St	NAFU Clean Room	EXP-NAFU EXP-Clean Room	Air	Outdoor	Stationary Stationary	Field Sample	N/A N/A	944 973	9/12/2001 1	0	0	0 0	0 0.006	0	0 0.006	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10096 1R-10097		303 W. Thomas St 303 W. Thomas St	Planer Building Planer Building	Northeast Corner of Planer Bldg. Southeast Corner of Planer Bldg.	Air	Outdoor Outdoor	Stationary Stationary	Field Sample	N/A N/A	1453 1447	9/13/2001 1	0	0	0 0	0	0	0 0	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10098 1R-10101	Drive - Truck Follow trucks	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A N/A	716 32	9/13/2001 1 9/13/2001 1	0	0	0 0.0176 0 0	0 0.008	0.0	0088 0.035	3 4	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10172 1R-10173		303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1398 1404	9/13/2001 1 9/13/2001 1		0 0.0025	0 0	0	0	0 0.002		0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10174 1R-10175		303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample	N/A N/A	1442 1455	9/13/2001 1	0	0.0024 0	0 0	0	0	0 0.002	4 1 0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10176 1R-10177		303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample		1463 1418	9/13/2001 1	0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10178 1R-10179		303 W. Thomas St 303 W. Thomas St	EXP-7 NAFU	EXP-7 EXP-NAFU	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample	N/A N/A	1411 1651	9/13/2001 1	0	0	0 0.0025 0 0	0	0	0 0.002	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10180 1R-10102		303 W. Thomas St 303 W. Thomas St	Clean Room EXP-1	EXP-Clean room EXP-1	Air Air	Outdoor	Stationary Stationary	Field Sample	N/A N/A	1657 1465	9/14/2001 1	0	0	0 0.0038	0	0	0 0.003	B 1 0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10103 1R-10104 1R-10105		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace EXP-4	EXP-2 EXP-3 EXP-4	Air Air	Outdoor Outdoor Outdoor	Stationary Stationary Stationary	Field Sample	N/A N/A N/A	1592 1512 1186	9/14/2001 1	0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10105 1R-10106 1R-10109		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-4 EXP-5 Clean Room	EXP-4 EXP-5 EXP-clean room	Air Air	Outdoor Outdoor Indoor	Stationary Stationary Stationary	Field Sample	N/A N/A N/A	1186 1518 1575	9/14/2001 1	0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10109 1R-10110 1R-10111		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	NAFU Planer Building	EXP-NAFU Northeast Corner of Planer Bldg.	Air Air Air	Outdoor	Stationary Stationary Stationary	Field Sample	N/A N/A N/A	1575 1596 1494	9/14/2001 1	0 0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10112	Operate - Excavator	303 W. Thomas St 303 W. Thomas St	Planer Building Property	Southeast Corner of Planer Bldg. Shoulder	Air	Outdoor	Stationary Stationary Personal	Field Sample	N/A N/A	1414 686	9/14/2001 1	0	0	0 0	0	0	0 0	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
	Follow trucks	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Lumber piles in exclusion zone	Air Dust	Outdoor Unknown	Personal	Field Sample	N/A N/A	62 300	9/14/2001 1	0	0	0 0	0 365	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10119 1R-10120		303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	EXP-Clean room EXP-NAFU	Air Air	Indoor Outdoor	Stationary Stationary		N/A N/A	1479 1490		0	0	0 0	0.0043	0	0 0.004	3 1	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10541 1R-10542		303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1485 1479	9/17/2001 1 9/17/2001 1	0 0	0	0 0	0	0	0 0	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10543 1R-10544		303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1479 1479	9/17/2001 1 9/17/2001 1	0	0	0 0 0 0.0024	0	0	0 0.002	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10545 1R-10546		303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1482 1485	9/17/2001 1	0	0	0 0	0	0	0 (	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10546 1R-10547		303 W. Thomas St 303 W. Thomas St	EXP-6 EXP-7	EXP-6 EXP-7	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1485 1470	9/17/2001 1	0	0	0 0	0	0	0 0	0 0	0	0 0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
1R-10547	1	303 W. Thomas St	EXP-7	EXP-7	Air	Outdoor	Stationary	Field Sample	N/A	1470	9/17/2001 1	0	0	01 0	01	0	0  (	ol ol	01	DI OI	01 01	01 0	01	01 0	Ol	01 0	0  0	J 0

IndexID values: LIKE "1r-%"

													Excluded Str		Libby Ampl	hiboles (LA)		Concentrations (Air		Chry	sotile (C)		Other Amphiboles ( OA )  Excluded Structures Structures Detected					
Sample ID					Media Type																ructures Detected							
	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)		Matrix	Sample Type	Category		Vol (air=L)/ ea (dust=cm²)	Sample Date	Grid Filter Status Open Non ings Analyzed	Ratio < 0.5 u	h <   Dia-   I meter > ( 0.5u	Length L 0.5 to 5 u to	Length 5 Le to 10 u 10	ength > Total Conc. LA	Total Aspect Count LA Ratio - 5:1	Length < Di 0.5 u mo	a- Length eter > 0.5 to 5	u to 10 u 10 u	gth > Total Conc. C	Total A: Count C R: 5:	spect Lengt atio < < 0.5	th Dia- u meter > 0. 0.5u	ength Length 5 to 5 u to 10 u	10 u Co	Total Total Count OA
1R-10555	Watering down	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property EXP-1	Shoulder EXP-1 EXP-2	Air Air	Outdoor Outdoor	Personal Stationary	Field Sample Field Sample	N/A	652 1527	9/17/2001 9/18/2001	10	0	0 0.0194	0	0	0 0.019	0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10556 1R-10557 1R-10558		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace EXP-4	EXP-3 EXP-4	Air Air Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A	1539 1551 1607	9/18/2001 9/18/2001 9/18/2001	10 10 10	0	0 0	0	0	0	0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10559 1R-10560		303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1607 1563	9/18/2001 9/18/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
	Drive - Truck	303 W. Thomas St 303 W. Thomas St	EXP-7 Property	EXP-7 Shoulder	Air Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A	1563 686	9/18/2001 9/18/2001	10 10	0	0 0 0 0.0184	0 0.0092	0.0092	0 0 0.036	0 4	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10567 1R-10568 1R-10569		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room NAFU EXP-1	EXP-clean room EXP-NAFU EXP-1	Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A	1560 1548 1545	9/18/2001 9/18/2001 9/19/2001	10 10 10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10570 1R-10571		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace	EXP-2 EXP-3	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1554 1548	9/19/2001 9/19/2001 9/19/2001	10	0	0 0	0.0023	0	0 0.002	1 1	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10572 1R-10573		303 W. Thomas St 303 W. Thomas St	EXP-4 EXP-5	EXP-4 EXP-5	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample		1579 1557	9/19/2001 9/19/2001	10	0	0 0	0	0.0022	0 0.002	1 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10574 1R-10575 1R-10578		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-6 EXP-7	EXP-6 EXP-7 EXP-clean room	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1563 1570	9/19/2001 9/19/2001	10	0	0 0	0	0	0	0 0	0 0	0 0.00	0 0	0 0.0022	0	0	0 0	0	0 0	0 0
1R-10579	Watering debris	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room NAFU Property	EXP-clean room  EXP-NAFU  Shoulder	Air Air	Outdoor Outdoor	Stationary Stationary Personal	Field Sample Field Sample Field Sample	N/A	1579 1579 738	9/19/2001 9/19/2001 9/19/2001	10 10 10	0	0 0	0.0085	0	0 0.017	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10664 1R-10665		303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1570 1567	9/20/2001 9/20/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10666 1R-10667		303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary		N/A	1567 1563	9/20/2001 9/20/2001	10 10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10668 1R-10669		303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-6	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1567 1570	9/20/2001 9/20/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10669 1R-10670 1R-10673		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-6 EXP-7 Clean Room	EXP-6 EXP-7 EXP-clean room	Air Air Air	Outdoor Outdoor Indoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample		1570 1567 1594	9/20/2001 9/20/2001 9/20/2001	10 10 10	0	0 0	0.0040	0	0 0.004	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10674 1R-10675	Decon wash	303 W. Thomas St 303 W. Thomas St	NAFU Property	EXP-NAFU Shoulder	Air Air	Outdoor Outdoor	Stationary Stationary Personal	Field Sample Field Sample	N/A N/A	1594 1597 696	9/20/2001 9/20/2001	10	0	0 0 0	0.0040	0.0091	0 0.004	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10678 1R-10679		303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1449 1491	9/21/2001 9/21/2001	10 10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10680 1R-10681 1R-10682		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4 EXP-5	EXP-3 EXP-4 EXP-5	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample Field Sample		1500 1506 1509	9/21/2001 9/21/2001 9/21/2001	10 10 10	0	0 0.0251	0.0084	0.0042	0 0.037	9	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10683 1R-10684		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-6 EXP-7	EXP-6 EXP-7	Air Air	Outdoor	Stationary Stationary Stationary	Field Sample	N/A	1512 1512	9/21/2001 9/21/2001 9/21/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10687 1R-10688		303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	EXP-clean room EXP-NAFU	Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample		1515 1515	9/21/2001 9/21/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10689 1R-10692	Watering debris	303 W. Thomas St 303 W. Thomas St	Property EXP-1	Shoulder EXP-1	Air Air	Outdoor Outdoor	Personal Stationary	Field Sample Field Sample	N/A N/A	716 1557	9/21/2001 9/22/2001	10 10	0	0 0	0.0023	0	0 0.002	0 1	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10693 1R-10694 1R-10695		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace EXP-4	EXP-2 EXP-3 EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A N/A N/A	1570 1570 1573	9/22/2001 9/22/2001 9/22/2001	10 10 10	0	0 0.0023	0	0	0 0.002	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10695 1R-10696		303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1573 1570 1573	9/22/2001 9/22/2001 9/22/2001	10	0	0 0	0	0	0	0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10698 1R-10721		303 W. Thomas St 303 W. Thomas St	EXP-7 Clean Room	EXP-7 EXP-clean room	Air Air	Outdoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1576 1470	9/22/2001 9/22/2001	10	0	0 0.0022 0 0	0	0.0086	0 0.002 0 0.008	1 1	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
	Decon wash	303 W. Thomas St 303 W. Thomas St	NAFU Property	EXP-NAFU Shoulder	Air Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A	1476 657	9/22/2001 9/22/2001	10 10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10726 1R-10727 1R-10728		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2 WRGrace	EXP-1 EXP-2 EXP-3	Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample		1536 1615 1618	9/24/2001 9/24/2001 9/24/2001	10 10 10	0.0022 0.0022	0 0	0	0	0 0.002 0 0.002	0 1	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10729 1R-10730		303 W. Thomas St 303 W. Thomas St	EXP-4 EXP-5	EXP-4 EXP-5	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1666 1669	9/24/2001 9/24/2001	10	0.0022	0 0	0	0	0 0.002	0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10731 1R-10732		303 W. Thomas St 303 W. Thomas St	EXP-6 EXP-7	EXP-6 EXP-7	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1675 1662	9/24/2001 9/24/2001	10 10	0	0 0	0.0043 0	0	0 0.004 0	0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10735 1R-10736 1R-10737		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room NAFU Planer Building	EXP-clean room  EXP-NAFU  EXP-Northeast planer shed	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A N/A	1403 1372 1397	9/24/2001 9/24/2001 9/24/2001	10 10 10	0.0045	0 0.0045	0	0	0 0.009	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10738	Drive - Truck	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Planer Building Planer Building Property	EXP-Northeast planer shed  EXP-Southeast planer shed  Shoulder	Air Air	Outdoor	Stationary Stationary Personal	Field Sample Field Sample Field Sample	N/A	1385 763	9/24/2001 9/24/2001 9/24/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10742 1R-10743		303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1440 1440	9/25/2001 9/25/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10744 1R-10745		303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1361 1446	9/25/2001 9/25/2001	10 10	0	0 0	0	0 0.0024	0 0 0.002	0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10746 1R-10747 1R-10748		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6 EXP-7	EXP-5 EXP-6 EXP-7	Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample		1461 1443 1448	9/25/2001 9/25/2001 9/25/2001	10 10 10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10751 1R-10752		303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	EXP-clean room EXP-NAFU	Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1525 1420	9/25/2001 9/25/2001 9/25/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10753 1R-10754		303 W. Thomas St 303 W. Thomas St	Planer Building Planer Building	EXP-Northeast planer shed EXP-Southeast planer shed	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1406 1406	9/25/2001 9/25/2001	10 10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10755 1R-10758 1R-10759	Watering debris	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property EXP-1	Shoulder EXP-1 EXP-2	Air Air	Outdoor Outdoor	Personal Stationary	Field Sample	N/A	636 1522	9/25/2001 9/26/2001	10	0	0 0.0099	0	0	0 0.009	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-10759 1R-10760 1R-11201		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace EXP-4	EXP-2 EXP-3 EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A N/A N/A	1420 1525 1528	9/26/2001 9/26/2001 9/26/2001	10 10 10	0	0 0	0	0	0	0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-11202 1R-11203		303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1531 1534	9/26/2001 9/26/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-11204 1R-11207		303 W. Thomas St 303 W. Thomas St	EXP-7 Clean Room	EXP-7 EXP-clean room EXP-NAFU	Air Air	Outdoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A	1531 1536	9/26/2001 9/26/2001	10	0	0 0	0	0	0	0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-11208 1R-11209 1R-11210		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	NAFU Planer Building Planer Building	EXP-NAFU EXP-Northeast planer shed EXP-Southeast planer shed	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample		1400 1233 1233	9/26/2001 9/26/2001 9/26/2001	10 10 10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
	Wash Truck	303 W. Thomas St 303 W. Thomas St	Property  EXP-1	Shoulder EXP-1	Air Air	Outdoor	Stationary Personal Stationary	Field Sample Field Sample Field Sample	N/A	667 1434	9/26/2001 9/26/2001 9/27/2001	10	0	0 0	0.0284	0	0.0095 0.037	4 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-11215 1R-11216		303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace	EXP-2 EXP-3	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1486 1492	9/27/2001 9/27/2001	10 10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-11217 1R-11218		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-4 EXP-5	EXP-4 EXP-5 EXP-6	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1514 1519	9/27/2001 9/27/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-11219 1R-11220 1R-11223		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-6 EXP-7 Clean Room	EXP-6 EXP-7 Clean room	Air Air	Outdoor Outdoor Indoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample		1522 1509 1390	9/27/2001 9/27/2001 9/27/2001	10 10 10	0 0 0.0025	0 0	0	0	0 0.002	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-11224 1R-11225		303 W. Thomas St 303 W. Thomas St	NAFU Planer Building	NAFU EXP-Northeast planer shed	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1380 1252	9/27/2001 9/27/2001 9/27/2001	10	0	0 0.0025	0	0	0 0.002	1 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-11226 1R-11227	Watering debris	303 W. Thomas St 303 W. Thomas St	Planer Building Property	EXP-Southeast planer shed Shoulder	Air Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A N/A	1258 649	9/27/2001 9/27/2001	10 10	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-11230 1R-11231 1R-11232		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-2 EXP-1	EXP-2 EXP-1 EXP-3	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample	N/A	1534 1510	9/28/2001 9/28/2001	10	0	0 0	0.0023	0	0 0.002	0 0	0 0	0 0.00	0 0	0 0.0023	1	0	0 0	0	0 0	0 0
1R-11232 1R-11233 1R-11234		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4 EXP-5	EXP-3 EXP-4 EXP-5	Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A N/A N/A	1496 1537 1524	9/28/2001 9/28/2001 9/28/2001	10 10 10	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0	0 0.002	0 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-11235 1R-11236		303 W. Thomas St 303 W. Thomas St	EXP-6 EXP-7	EXP-6 EXP-7	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1529 1529	9/28/2001 9/28/2001	10 10	0	0 0.0023 0 0 0	0	0	0 0.002	1 0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0
1R-11237 1R-11238		303 W. Thomas St 303 W. Thomas St	Planer Building Planer Building	North side of Planer Bldg. South side of Planer Bldg.	Air Air	Outdoor Outdoor	Stationary	Field Sample Field Sample		1352 1355	9/28/2001 9/28/2001	10 10	0	0 0	0	0	0	0	0 0	0	0 0	0 0	0	0	0 0	0	0 0	0 0

IndexID values: LIKE "1r-%"

													Excluded St		Libby Ampl		)	Concentrations (Air =	<u> </u>	Chr	/sotile (C)			Evoludo	nd Structures	Other Amphi		
Sample ID					Media Type																tructures Detected							
	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)		Matrix	Sample Type	Category		(dust=cm <sup>2</sup> )	Sample Date	Grid Filter State Open Non ings Analyzed	us Aspect Length Ratio < 0.5 u d 5:1	h < Dia- meter > 0.5u	0.5 to 5 u	Length 5 Le to 10 u 10	ength > Total D u Conc. LA	Total Aspect Count LA Ratio < 5:1	Length < Dia 0.5 u me 0.5	ter > 0.5 to \$	Length 5 Ler u to 10 u 10	u Conc.	C Count C	Aspect Le Ratio < < 5:1	ength Dia- 0.5 u mete 0.5u	r > 0.5 to 5 u t	Length 5 o 10 u 10 u	Total Total Count OA
1R-11239 1R-11240	0	303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	Clean room in decon trailer Outside in exhaust of NAFU	Air Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1346 1360	9/28/2001 9/28/2001	10	0	0 0.0026	0.0026	0	0 0.005	2 0	0	0	0 0	0	0 0	0 0	0	0 0	0 C	) 0 C
1R-11263 1R-11266 1R-11267	Operate - Excavator	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Auto EXP-1 EXP-2	Cab of excavator  EXP-1  EXP-2	Air Air Air	Outdoor Outdoor	Personal Stationary	Field Sample Field Sample Field Sample	N/A 1	713 1485 1522	9/28/2001 9/29/2001 9/29/2001	10 10 10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0
1R-11268 1R-11269		303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3	Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample	N/A 1	1487 1490	9/29/2001 9/29/2001 9/29/2001	10	0	0 0	0.0094	0	0 0.009	0 0	0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0
1R-11270 1R-11271		303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1461 1463	9/29/2001 9/29/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0	0 0	0 0	0	0 0	0 0	) 0 C
1R-11272 1R-11273		303 W. Thomas St 303 W. Thomas St	EXP-7 Clean Room	EXP-7 Clean room	Air Air	Outdoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1534 1213	9/29/2001 9/29/2001	10 10	0	0 0 0 0.0029	0.0023 0.0115	0	0 0.002 0 0.014	1 ( 5 (	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11274 1R-11275		303 W. Thomas St 303 W. Thomas St	NAFU Planer Building	NAFU North side of Planer Bldg.	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1202 1267	9/29/2001 9/29/2001	10 10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
	Drive - Truck	303 W. Thomas St 303 W. Thomas St	Planer Building Auto	South side of Planer Bldg. Cab of Truck	Air Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A	1269 858	9/29/2001 9/29/2001	0	0	0 0	0.0055	0	0 0.005	0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0
1R-11277 1R-11469 1R-11469	Drive - Truck	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Auto EXP-1 EXP-1	Cab of Truck EXP-1 EXP-1	Air Air Air	Outdoor Outdoor	Personal Stationary	Field Sample Field Sample	N/A 1	858 1441	9/29/2001 10/1/2001	10 10 10	0	0 0.0171	0.0512	0	0 0.068	0 0	0	0 0.0	0 0	0 0.017	71 1 0 C	0	0	0 0	0 0	0 0
1R-11470 1R-11471		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2 WRGrace	EXP-1 EXP-2 EXP-3	Air Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 1	1441 1479 1514	10/1/2001 10/1/2001 10/1/2001	10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0
1R-11471 1R-11472 1R-11473		303 W. Thomas St 303 W. Thomas St	EXP-4 FXP-5	EXP-4 EXP-5	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1479	10/1/2001 10/1/2001 10/1/2001	10	0.0024	0 0	0	0	0 0.002	1 0	0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0
1R-11473 1R-11474		303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1479	10/1/2001 10/1/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0	0 0	0 0	0	0 0	0 0	3 0 C
1R-11475 1R-11476		303 W. Thomas St 303 W. Thomas St	EXP-7 EXP-8	EXP-7 EXP-8	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1485 1485	10/1/2001 10/1/2001	10 10	0	0 0	0.0024 0.0024	0	0 0.002 0 0.002	1 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11479 1R-11482		303 W. Thomas St 303 W. Thomas St	Property Clean Room	Work area in E2 Clean room-export plant	Air Air	Outdoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A 1	622 1359	10/1/2001 10/1/2001	10 10	0	0 0	0	0.0056 0	0 0.005	1 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11486 1R-11487		303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1490 1463	10/2/2001 10/2/2001	10	0	0 0	0.0024	0	0 0.002	1 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11488 1R-11489		303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1493 1501	10/2/2001 10/2/2001	10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 (
1R-11490 1R-11491 1R-11492		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6 EXP-7	EXP-5 EXP-6 EXP-7	Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 1	1499 1501 1501	10/2/2001 10/2/2001 10/2/2001	10 10 10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11493 1R-11494		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-7 EXP-8 Clean Room	EXP-8 Clean room in CR7	Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample	N/A 1	1421	10/2/2001 10/2/2001 10/2/2001	10	0	0 0	0.0024	0	0 0.002	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0
1R-11495	Drive - Truck	303 W. Thomas St 303 W. Thomas St	NAFU Property	In the flow of the exhaust of NAFU	Air	Outdoor	Stationary	Field Sample Field Sample	N/A 1	1487	10/2/2001	10	0.0025	0 0	0.0024	0	0 0.015	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0
1R-11503 1R-11504		303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air	Outdoor	Stationary	Field Sample Field Sample	N/A 1	1471 1434	10/3/2001 10/3/2001	10	0	0 0	0.0127	0	0	0 0	0 0	0	0 0	0	0 0	0 0	0	0 0	0 0	3 0 C
1R-11505 1R-11506		303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1504 1504	10/3/2001 10/3/2001	10	0	0 0	0.0023	0	0 0.002	1 0	0 0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0 0
1R-11507 1R-11508		303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1510 1515	10/3/2001 10/3/2001	10 10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11509 1R-11510		303 W. Thomas St 303 W. Thomas St	EXP-7 EXP-8	EXP-7 EXP-8	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1556 1524	10/3/2001 10/3/2001	9 10	0.0025	0 0	0	0	0 0.002	1 0	0	0 0.0	0 0	0 0.002	0 0	0	0	0 0	0 0	0 0 0
1R-11511 1R-11512		303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	Clean room in CRZ trailer In exhaust of NAFU	Air Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1487 1482	10/3/2001 10/3/2001	10	0	0 0	0.0024	0	0 0.002	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11513 1R-11518 1R-11519	Decon trucks	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property EXP-1 EXP-2	Decon area EXP-1 EXP-2	Air Air	Outdoor Outdoor	Personal Stationary	Field Sample Field Sample	N/A 1	679 1404 1382	10/3/2001 10/4/2001 10/4/2001	10 10 10	0.0258	0 0.0052	0	0.0052	0 0.036	0 0	0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0
1R-11519 1R-11520 1R-11521		303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 1	1410 1415	10/4/2001 10/4/2001 10/4/2001	10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0
1R-11522 1R-11523		303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1415	10/4/2001	10	0.0025	0 0	0	0	0 0.002	1 0	0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0 0
1R-11524 1R-11525		303 W. Thomas St 303 W. Thomas St	EXP-7 EXP-8	EXP-7 EXP-8	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1418 1421	10/4/2001 10/4/2001	10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0 0	0	0 0	0 0	J 0 C
1R-11526 1R-11527		303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	Clean room in CRZ In exhaust of NAFU	Air Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1465 1424	10/4/2001 10/4/2001	10 10	0	0 0	0.0024	0	0 0.002 0.0025 0.002	1 (	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11533	Operate - Excavator	303 W. Thomas St 303 W. Thomas St	Auto EXP-1	Cab of excavator EXP-1	Air Air	Outdoor Outdoor	Personal Stationary	Field Sample Field Sample	N/A 1	770 1435	10/4/2001 10/5/2001	10	0	0 0	0	0.0024	0.0045 0.004 0 0.002	1 (	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11534 1R-11535		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace EXP-4	EXP-2 EXP-3 EXP-4	Air Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1451	10/5/2001 10/5/2001	10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 (
1R-11536 1R-11537 1R-11538		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air Air Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 1	1424 1424 1427	10/5/2001 10/5/2001 10/5/2001	10 10 10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0
1R-11539 1R-11540		303 W. Thomas St 303 W. Thomas St	EXP-7 EXP-8	EXP-7 EXP-8	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1429 1429	10/5/2001 10/5/2001 10/5/2001	10	0	0 0	0.0024	0	0 0.002	1 0	0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0
1R-11583 1R-11586	Drive - Truck	303 W. Thomas St 303 W. Thomas St	Auto Clean Room	Cab of haul truck Clean room in CRZ	Air	Outdoor	Personal Stationary	Field Sample Field Sample	N/A	876 1239	10/5/2001 10/5/2001	10	0.0240	0 0.0320	0.0360	0	0 0.091	23 0	0 0	0	0 0	0	0 0	0 0	0	0 0	0 0	3 0 C
1R-11587 1R-11648		303 W. Thomas St 303 W. Thomas St	NAFU EXP-6	In exhaust of NAFU EXP-6	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1463 1521	10/5/2001 10/5/2001	10 10	0	0 0	0.0023	0	0 0.002	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11588 1R-11589		303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1568 1551	10/8/2001 10/8/2001	10 10	0	0 0	0	0	0	0 (	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11590 1R-11591		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4 EXP-5	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1557 1546	10/8/2001 10/8/2001	10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0
1R-11592 1R-11593 1R-11594		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6 EXP-7	EXP-5 EXP-6 EXP-7	Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 1	1570 1573 1576	10/8/2001 10/8/2001 10/8/2001	10 10 10	0.0022	0 0	0	0	0 0.002	0 0	0	0	0 0	0	0 0	0	0	0 0	0 (	0 0
1R-11595	Drive - Haul truck	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-7 EXP-8 Auto	EXP-8 Cab of haul truck	Air Air	Outdoor	Stationary Stationary Personal	Field Sample Field Sample Field Sample	N/A 1	1576 1579 788	10/8/2001 10/8/2001 10/8/2001	10	0.0044	0 0.0089	0.0222	0.0133	0 0.048	0 0	0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0 0
1R-11597 1R-11598		303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	Clean room in CRZ In exhaust of NAFU	Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1 N/A 1	1579 1573	10/8/2001 10/8/2001 10/8/2001	10 10	0	0 0	0.0022	0	0 0.002	1 0	0 0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0 0
1R-11643 1R-11644		303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1 N/A 1	1460 1482	10/9/2001 10/9/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0 0
1R-11645 1R-11646		303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1509 1515	10/9/2001 10/9/2001	10 10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11647 1R-11649		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-7	EXP-5 EXP-7 EXP-8	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1518 1518	10/9/2001 10/9/2001	10	0	0 0	0	0	0	0 0	0	0 0.0	0 0	0 0.002	0 0	0	0	0 0	0 0	0 0
1R-11650 1R-11621 1R-11622		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-8 EXP-2 EXP-4	EXP-8 EXP-2 EXP-4	Air Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1515 1354 1342	10/9/2001 10/10/2001 10/10/2001	10 10 10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0 (	0 0 0
1R-11622 1R-11623 1R-11624		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-4 EXP-5 EXP-6	EXP-5 EXP-6	Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 1	1342 1360 1357	10/10/2001 10/10/2001 10/10/2001	10 10 10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0 (	0 0
1R-11625 1R-11626		303 W. Thomas St 303 W. Thomas St	EXP-7 EXP-8	EXP-7 EXP-8	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1367 1367	10/10/2001	10	0	0 0 0 n	0	0	0	0 0	0 0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0
1R-11627 1R-11628		303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	Clean room in CRZ trailer In exhaust of NAFU	Air Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1	1282 1291	10/10/2001 10/10/2001 10/10/2001	10	0	0 0	0	0	0	0 0	0 0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0 0
1R-11629 1R-11659		303 W. Thomas St 303 W. Thomas St	Property EXP-1	Back porch of residence on the Northwest side of EXP-1	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1 N/A 1	1348 1303	10/10/2001 10/10/2001	10 10	0	0 0	0	0	0	0 0	0	0	0 0	0	0 0	0	0	0 0	0 0	0 0 0
1R-11660 1R-10787		303 W. Thomas St 303 W. Thomas St	EXP-2 Property	EXP-2 Southeast side of Planer Bldg., outside door stoop	Air Dust	Outdoor Building	Stationary	Field Sample Field Sample	N/A 1 N/A	1342 300	10/10/2001 10/12/2001	10 10	0	0 0 0 85,273		140,091	0 18,273 444,63	0 ( 73 (	0	0 12,	0 0 182 6,091	0 6,091 24,36	0 0	0	0 6,	0 0 091 0	0 0	0 0 0 0 6,091 1
1R-10788 1R-10789		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Sawdust exhaust chute outside  North side of building, large covered concrete pad	Dust Dust	Unknown Building		Field Sample Field Sample	N/A	300	10/12/2001 10/12/2001	10	0	0 1,218 0 12,182		12,182	0 3,65 0 24,36		0	0	0 0	0	0 0	0 0	0	0 0	0 0	0 0
1R-10790 1R-10791 1R-10792		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Planer Building Planer Building Planer Building	Planer Bldg. west side cross members, inside Planner building, lunch room Main doorway of planner building	Dust Dust	Building Building Building		Field Sample Field Sample Field Sample	N/A	300 300 300	10/12/2001 10/12/2001 10/12/2001	10 10 10	0	0 0 0 609 0 18,273	7,309 0 30,455	0	0 7,30 0 60 6.091 67.00	1 (	0	0	0 0 609 0 0 6,091	0 60 0 6,09		0	0	0 0	0 0	0 0
1R-10792 1R-10795		303 W. Thomas St		Main doorway of planner building Planner building, nw side of building	Dust Air		Stationary				10/12/2001		6,091 0	0 0.0556	30,455 0.2782				0	0	0 0	0 6,09	0 0	0	0	0 0	0 (	0 0

																		ISO Co	oncentratio	ns (Air = s	tructures/c	c)(Dust =	structure	/cm²) (ME1	HOD - IS	O 10312)									
																Amphiboles ( LA							Chryso	ile (C)		,					Other Amphi				
Sample ID				Media Type								_	Excluded	Structures	s	Structures Detec	ted		F	Exclu	ded Structi	ıres	Stru	tures Dete	cted	_		Exc	luded Stru	ctures	Struct	ures Detect	ted		
				modia Typo																														/	
Task	Property Group (Location)	Sample Group	Location Description (Sub Location)		Matrix	Sample Type	Category	Pre Post	Vol (air=L)/	Sample Date	Grid F	Filter Status As Non Ra	spect Len	igth < Dia-	Length	Length 5 L to 10 u	ength > T	otal	Total A	Aspect	Length <	Dia-	Length	Length 5	Length >	Total	Total	Aspect	Length	Dia- L	Length L 0.5 to 5 u t	Length 5 L	ength >		Total Count
	(Location)							Clear	Area (dust=cm²)		Open	Analyzed 5:1	1	0.5u	0.5 10 5	i lo io u	0 0	IIC. LA	South LA	i:1	0.5 u	0.5u	0.5 to 5 ti	10 10 u	10 u	Conc. C	Count	5:1	0.5 u	0.5u	0.5 10 5 4 1	10 10 11	ou co	JIIC. OA	OA
												•																							
1R-10796 1R-10797	303 W. Thomas St 303 W. Thomas St	Planer Building Planer Building	Northeast side of Planer Bldg.  Planner building, SE side of building	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample		1761 1761	10/12/2001	10		0	0 0.05		0.0544 0.1087		0.1631	3	0	0	0	0.0544	0	-	0.054	0	0	0 0	0 0	0	0	0	- 0	- 0
1R-10798	303 W. Thomas St	Planer Building	Planner building, lunch room	Air	Indoor	Stationary	Field Sample	N/A	1813	10/12/2001	10		0	0 0.10				0.4223	4	0	0	0	0.0344	0		0.034	0	0	0 0	0 0	0	0	0	0	0
1R-10799	303 W. Thomas St	Planer Building	Southwest side of Planer Bldg.	Air	Outdoor	Stationary	Field Sample	N/A	1813	10/12/2001	10		0	0		168 0.0528		0.3696	7	0	0	0	(	0		D	0	0	0 0	0	0	0	0	0	0
1R-10855 1R-10856	303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace	EXP-2 EXP-3	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	778 774	10/22/2001	10		0	0 0.00	045	0 0	0	0.0045	1	0	0	0	(	0	-	0	0	0	0 0	0 0	0	0	0	- 0	- 0
1R-10857	303 W. Thomas St	EXP-4	EXP-4	Air	Outdoor	Stationary	Field Sample	N/A	768	10/22/2001	10		0	0	0	0 0	0	0	0	0	0	0	(	0	-	0	0	0	0 0	0 0	0	0	0	0	0
1R-10858	303 W. Thomas St	EXP-1	EXP-1	Air	Outdoor	Stationary	Field Sample		787	10/22/2001	10		0	0	0	0 0	0	0	0	0	0	0	(	0	-	D	0	0	0 0	0	0	0	0	0	0
1R-10859 1R-10860	303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	753 759	10/22/2001	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0 0	0	0	0	0	- 0
1R-10863	303 W. Thomas St	EXP-7	EXP-7	Air	Outdoor	Stationary	Field Sample		756	10/22/2001	10		0	0	0	0 0	0	0	0	0	0	0		0		0	0	0	0 0	0 0	0	0	0	0	0
1R-10864	303 W. Thomas St	EXP-8	EXP-8	Air	Outdoor	Stationary	Field Sample	N/A	762	10/22/2001	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0	0	0	0	0	0
1R-10873 1R-10874	303 W. Thomas St 303 W. Thomas St	EXP-1 FXP-2	EXP-1 FXP-2	Air Air	Outdoor Outdoor		Field Sample Field Sample		1561 1567	10/23/2001	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0	0	0	0	0	0
1R-10874 1R-10875	303 W. Thomas St	WRGrace	EXP-2	Air	Outdoor	Stationary	Field Sample		1567	10/23/2001	10		0	0	0	0 0	0	0	0	0	0	0	(	0	-	0	0	0	0 0	0 0	0	0	0	0	0
1R-10876	303 W. Thomas St	EXP-4	EXP-4	Air	Outdoor		Field Sample		1558	10/23/2001	10		0	0	0	0 0	0	0	0	0	0	0		0		0	0	0	0 0	0 0	0	0	0	0	0
1R-10877 1R-10878	303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air	Outdoor		Field Sample		1561 1558	10/23/2001	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0	0	0	0	0	0
1R-10878 1R-10879	303 W. Thomas St 303 W. Thomas St	EXP-6 FXP-7	EXP-6	Air Air			Field Sample Field Sample		1558 1558	10/23/2001 10/23/2001	10		0	0 0.00	122	0 0	0	0.0022	0	0	0	0	(	0	-	0	0	0	0 0	0 0	0	0	0	0	0
1R-10880	303 W. Thomas St	EXP-8	EXP-8	Air	Outdoor	Stationary	Field Sample	N/A	1555	10/23/2001	10		0	0	0	0 0	0	0	0	0	0	0		0		Ď	0	0	0 0	0 0	0	0	0	0	0
1R-12727	303 W. Thomas St	EXP-1	EXP-1	Air	Outdoor	Stationary	Field Sample	N/A	1471	10/24/2001	10		0	0	0.00	024 0	0	0.0024	1	0	0	0	(	0	-	D	0	0	0 0	0	0	0	0	0	0
1R-12728 1R-12729	303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace	EXP-2 EXP-3	Air Air	Outdoor Outdoor	Stationary			1474 1471	10/24/2001 10/24/2001	10		0.0024	0	0	0 0	0	0.0024	1	0	0	0	(	0		0	0	0	0 0	0	0	0	0	0	0
1R-12729 1R-12730	303 W. Thomas St	WKGrace EXP-4	EXP-4	Air	Outdoor	Stationary Stationary	Field Sample Field Sample		1471	10/24/2001	10		0	0	0	0 0	0	0	0	0	0	0		0		0	0	0	0 0	0 0	0	0	0	0	0
1R-12731	303 W. Thomas St	EXP-5	EXP-5	Air	Outdoor	Stationary	Field Sample	N/A	1477	10/24/2001	10		ō	0	0	0 0	0	0	0	0	0	0	i	0		0	0	0	0 0	0 0	0	ő	0	0	0
1R-12732	303 W. Thomas St	EXP-6	EXP-6 FXP-7	Air	Outdoor	Stationary	Field Sample	N/A	1474	10/24/2001	10		0	0	0	0 0	0	0	0	0	0	0	(	0	ı	0	0	0	0 0	0	0	0	0	0	0
1R-12733 1R-12734	303 W. Thomas St 303 W. Thomas St	EXP-7 EXP-8	EXP-7 EXP-8	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1471 1487	10/24/2001 10/24/2001	10		0	0	0	0 0	0	0	0	0	0	0	(	0	-	0	0	0	0 0	0 0	0	0	0	0	0
1-04593 Planar set-up	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	66	11/16/2001	10		0	0	0	0 0	0	0	0	0	0	0		0		0	0	0	0 0	0 0	0	0	0	0	0
1-04594 Planar set-up	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	68	11/16/2001	10		0	0	0	0 0	0	0	0	0	0	0	(	0		D	0	0	0 0	0	0	0	0	0	- 0
1-04595 Wood pull-stacking 1-04596 Wood feed	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Outdoor	Personal Personal	Field Sample Field Sample	N/A	235 239	11/16/2001 11/16/2001	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0	0	0	0	0	- 0
1-04596 Wood reed 1-04597 Wood pull-stacking	303 W. Thomas St	Property	Shoulder	Air	Outdoor	Personal	Field Sample		239	11/16/2001	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0 0	0	0	0	- 0	0
1-04598 Wood feed	303 W. Thomas St	Property	Shoulder	Air		Personal	Field Sample	N/A	235	11/16/2001	10		0	0	0	0 0	0	0	0	0	0	0		0		0	0	0	0 0	0	0	0	0	0	0
1-04599 Planar set-up 1-04242	303 W. Thomas St 303 W. Thomas St	Property	Shoulder Adjacent lunch room	Air	Indoor	Personal			219 1488	11/16/2001 12/10/2001	10		0.0024	0	0	0 0	0	0.0024	0	0	0	0	(	0		0	0	0	0 0	0	0	0	0	0	0
1-04242 1R-13881	303 W. Thomas St	Planer Building Property	Lunch room	Air Air	Indoor	Stationary Stationary	Field Sample Field Sample		1488	12/10/2001 2/12/2002	10		0.0024	0	0	0 0	0	0.0024	1	0	0	0	(	0		0	0	0	0 0	0 0	0	0	0	0	0
1R-13882	303 W. Thomas St	Property	South wall	Air	Indoor		Field Sample		1274	2/12/2002	10		0	0	0	0 0	0	0	0	0	0	0	ì	0		0	0	0	0 0	0 0	0	0	0	0	0
1R-13883	303 W. Thomas St	Property	West wall	Air	Indoor	Stationary	Field Sample	N/A	1303	2/12/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0	0	0	0	0	0
1R-13884 1R-13911	303 W. Thomas St 303 W. Thomas St	Property	East wall North wall of Planer Bidg.	Air Air	Indoor	Stationary Stationary			1313 1325	2/12/2002 3/14/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0 0	0	0	0	0	- 0
1R-13912	303 W. Thomas St	Property Property	East wall of Planer Bldg.	Air	Indoor	Stationary	Field Sample Field Sample	Clear	1309	3/14/2002	10		0	0	0	0 0	0	0	0	0	0	0		0		0	0	0	0 0	0 0	0	0	0	0	0
1R-13913	303 W. Thomas St	Property	South wall of Planer Bidg.	Air	Indoor	Stationary	Field Sample		1370	3/14/2002	10		0	0	0	0 0	0	0	0	0	0	0	0.0026	0	-	0.002	6	1	0 0	0	0	0	0	0	0
1R-13937 1R-13938	303 W. Thomas St 303 W. Thomas St	Property	West end South End	Air Air	Indoor	Stationary	Field Sample Field Sample		1353	4/12/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0	0	0	0	0	0
1R-13938 1R-13939	303 W. Thomas St	Property Property	East End	Air	Indoor	Stationary Stationary	Field Sample		1358 1367	4/12/2002 4/12/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0 0	0	0	0	- 0	0
1R-13940	303 W. Thomas St	Property	North End	Air	Indoor	Stationary	Field Sample		1381	4/12/2002	10		0	0	0	0 0	0	0	0	0	0	0	ì	0		0	0	0	0 0	0 0	0	0	0	0	0
1-06871	303 W. Thomas St	Property	Northeast corner	Air	Indoor	Stationary	Field Sample	N/A	1209	5/14/2002	10		0	0	0.00	054 0	0	0.0054	1	0	0	0	(	0	ı	0	0	0	0 0	0	0	0	0	0	0
1-06872 1-06873	303 W. Thomas St 303 W. Thomas St	Property	Southeast corner Southwest corner	Air Air	Indoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1200 1200	5/14/2002 5/14/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0 0	0	0	0	- 0	0
1-06874	303 W. Thomas St	Property Property	Northwest corner	Air	Indoor	Stationary	Field Sample	N/A	1200	5/14/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0 0	0	0	0	0	0
1R-13967 Cleaning planar	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	70	5/30/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0	-	D	0	0	0 0	0	0	0	0	0	0
1R-13977 Cleaning planar	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor	Personal Personal	Field Sample Field Sample	N/A	65 156	5/31/2002 5/31/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0	0	0	0	0	0
1R-13980  1R-13808 Cleaning planar	303 W. Thomas St	Property Property	Shoulder	Air	Indoor	Personal	Field Sample		156 440	5/31/2002 6/3/2002	10		0.0148	0	0 0.04	0 0 445 0.0148	0	0.0742	5	0.0148	0	0	0.0445	0	-	0.059	3	4	0 0	0 0	0	0	0	0	0
1R-13810 Cleaning planar	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	60	6/3/2002	10		0.1088	0	0 0.10			0.2175	2	0	0	0	0.2175	0		0.033		2	0 0	0	0	0	0	0	0
1R-13812 Cleaning planar	303 W. Thomas St	Property	Shoulder	Air	Indoor	Personal	Field Sample		199	6/3/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0 0.032	28 0	0.0328	0.2951	0.0328	0	0.3935	12
1R-13815 Cleaning planar	303 W. Thomas St 303 W. Thomas St	Property Building	Shoulder North side	Air Air	Indoor	Personal Stationary	Field Sample Field Sample		305 1289	6/4/2002 9/7/2002	10		0	0	0	0 0	0	0	0	0	0	0	0.0428	0		0.042	0	0	0 0	0	0	0	0	0	0
1-07210	303 W. Thomas St	Building	East side	Air	Indoor	Stationary	Field Sample	N/A	1289	9/7/2002	10		0	0	0	0 0	0	0	0	0	0	0		0		0	0	0	0 0	0 0	0	0	0	0	0
1-07231	303 W. Thomas St	Building	South side	Air	Indoor	Stationary	Field Sample	N/A	1284	9/7/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0		D	0	0	0 0	0	0	0	0	0	0
1-07232	303 W. Thomas St 303 W. Thomas St	Building	West side North end of planar bldg; Make up air	Air	Indoor Outdoor	Stationary	Field Sample		1284	9/7/2002	10		0	0 0.00		0 0		0.0051	1	0	0	0	(	0		0	0	0	0 0	0 0	0	0	0	0	0
1R-15801 1R-15802	303 W. Thomas St	Property Property	West side of planar bldg under NAFU	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample		1386 1379	10/7/2002 10/7/2002	10		0	0 0.00	0	0 0	0	0.0047	0	0	0	0		0	-	0	0	0	0 0	0	0	0	0	0	0
1R-15803	303 W. Thomas St	Property	South side of planar bldg under NAFU	Air	Outdoor	Stationary	Field Sample		1379	10/7/2002	10		0	0	0	0 0	0	0	0	0	0	0	- 0	0		0	0	0	0 0	0 0	0	0	0	0	0
1R-15814	303 W. Thomas St 303 W. Thomas St	Property	North end of plant building makeup area	Air	Outdoor	Stationary	Field Sample		1477 1477	10/8/2002 10/8/2002		Overloaded		0				0	0		0						0	0	0					0	0
1R-15814 1R-15815	303 W. Thomas St 303 W. Thomas St	Property Property	North end of plant building makeup area West side of plant building under NAFU	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1477	10/8/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0	- 1	0	0	0	0 0	0 0	0	0	0	0	0
1R-15816	303 W. Thomas St	Property	South side of plant building under NAFU	Air	Outdoor	Stationary	Field Sample		1459	10/8/2002	10		0	0	0	0 0	0	0	0	0	0	0		0		0	0	0	0 0	0 0	0	0	0	0	0
1R-15742	303 W. Thomas St	Property	N. Planner Bldg. makeup	Air	Outdoor	Stationary	Field Sample	N/A	1335	10/9/2002	10		0	0	0	0 0	0	0	0	0	0	0	Ċ	0		D	0	0	0 0	0	0	0	0	0	0
1R-15743	303 W. Thomas St	Property	W. planer bldg. NAFU exhaust S. Planer bldg. NAFU exhaust	Air	Outdoor	Stationary	Field Sample	N/A	1408	10/9/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0	0	0	0	0	0
1R-15744 1R-15757	303 W. Thomas St 303 W. Thomas St	Property Property	S. Planer bildg. NAFU exhaust  North planer building makeup	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1408 1234	10/9/2002 10/10/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0	- 1	0	0	0	0 0	0 0	0	0	0	0	0
1R-15758	303 W. Thomas St	Property	West planer building NAFU exhaust	Air	Outdoor	Stationary	Field Sample	N/A	1210	10/10/2002	10		0	0	0	0 0	0	0	0	0	0	0		0		0	0	0	0 0	0 0	0	0	0	0	0
1R-15759	303 W. Thomas St	Property	South planer building NAFU exhaust	Air	Outdoor	Stationary	Field Sample	N/A	1239	10/10/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0		D	0	0	0 0	0	0	0	0	0	0
1R-15894 1R-15895	303 W. Thomas St	Property	Makeup N planer building NAFU exhaust; West planer building	Air	Outdoor	Stationary	Field Sample	N/A	1254	10/11/2002	10		0	0	0	0 0	0	0	0	0	0	0	(	0		0	0	0	0 0	0	0	0	0	0	0
1R-15895 1R-15896	303 W. Thomas St	Property Property	NAFU exhaust; West planer building NAFU exhaust; South planer building	Air	Outdoor	Stationary	Field Sample Field Sample	N/A	1326 1254	10/11/2002 10/11/2002	10		0	0	0	0 0	0	0	0	0	0	0		0	-	0	0	0	0 0	0 0	0	0	0	0	0
		sporty		,			Jumpio						-	-1	-1	-			J	3	3	3				1	-1		-1 0		3	-	-		

Appendix B - Personal and Stationa	ry Air Monitoring D	ata Collected I	During OU1 Removal and Response Ad	tivities a	of April 27	, 2007																		
Nata: The report excludes all I ab OC recu	ulte such as those asso	ociated with Lah I	Blanks, Lab Duplicates, Re-Preparation, Re-c	ount Sama	Pa count Dit	farant Varific	d Analysis ata																	
Note: The report excludes all Lab QC rest	its, such as those asso	ciated with Lab i	Blanks, Lab Duplicates, Re-Freparation, Re-C	ount Same,	Ke-count Di	lielent, verme	d Allalysis, etc.			DOM (MET.U.)														
										PCM (METHOI NIOSH 7400)		Poisson Concentrati	on Confidence				AHE	ERA / ASTM 5755	1					
												Interval (90% Confidence on Concentration	dence Interval											
											Filter Status				Libby Amphiboles ( L	Asb conc		Chrysotile ( C )	Asb conc	Othe	r Amphiboles ( OA )		Total Asi	bestos
									ol (air=L)/ Area		Non Analyzed				Analytical Sensitivity	(Air = S/cc) or (Dust =		Sensitivity	(Air = S/cc) or (Dust =				Asbestos	Asb conc (Air
Sample ID Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Clear (di	ust=cm²) San	nple Date Fibers/CC		Lower Bound I	Jpper Bound	S<5u	(Air = S/cc) or S>5u (Dust = S/cm <sup>2</sup> )	(Dust = S/cm <sup>2</sup> ) S<5			(Dust = S/cm <sup>2</sup> )	S<5u S>5u	(Air = S/cc) or (Dust = S/cm <sup>2</sup> ) (E	S/cc) or Dust = S/cm <sup>2</sup> )	Type Identified S<5u	= S/cc) or S>5u (Dust = S/cm <sup>2</sup> )
1R-04551 Vacuum Planar Building 1R-04552 Vacuum Planar Building 1R-04553 Vacuum Planar Building	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder Shoulder	Air	Indoor	Personal Personal	Field Sample Field Sample	N/A N/A	63 5	/9/2001 0.011 /9/2001 < 0.043												U	NK 0	0 < 0.00800 0 < 0.04740
1R-04553 Vacuum Planar Building 1R-04561	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Planer Building	Shoulder  Shoulder  North side of Planer Bldg.	Air Air Air	Indoor Indoor Indoor	Personal Personal	Field Sample Field Sample Field Sample	N/A	63 5	/9/2001 0.017 /9/2001 < 0.043 /9/2001 < 0.002												Ü	NK 0 NK 0 NK 0	0 < 0.00800 0 < 0.04740 0 < 0.00440
1R-04562 1R-04557 Vacuum Planar Building, Export Plant	303 W. Thomas St 303 W. Thomas St		South side of Planer Bldg. Shoulder	Air	Indoor	Stationary Stationary Personal	Field Sample Field Sample		1347 5	/9/2001 < 0.002 /9/2001 < 0.002 10/2001 0.032												U	NK 0	0 < 0.00440 0 < 0.00440 0 < 0.01480
1R-04558 Vacuum Planar Building, Export Plant 1R-04559 Vacuum Planar Building, Export Plant	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A	61 5/	10/2001 0.056 10/2001 0.02												U	NK 0	0 < 0.04890 0 < 0.01480
1R-04560 Vacuum Planar Building, Export Plant 1R-04577	303 W. Thomas St 303 W. Thomas St		Shoulder North side of Planer Bldg.	Air Air	Indoor Indoor	Personal Stationary	Field Sample Field Sample			10/2001 < 0.044 10/2001 < 0.002												U	REM 0	1 0.04890 0 < 0.00500
1R-04578 1R-04608	303 W. Thomas St 303 W. Thomas St	Planer Building	South side of Planer Bldg. South side of Planer Bldg.	Air Air	Indoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A	1102 5/	10/2001 < 0.002 14/2001 0.003													NK 0	0 < 0.00500 0 < 0.00450
1R-04611 1R-04631	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Planer Building	Northeast side of Planer Bldg. Northeast side of Planer Bldg.	Air Air	Indoor	Stationary Stationary	Field Sample Field Sample	N/A	2359 5/	15/2001 0.004 16/2001 0.003													NK 0	0 < 0.00320
1R-04485 1R-06893 1R-07101 Hepa vacuum	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Planer Building Property Property	Main work area  Center of room  Shoulder	Air Air Air	Indoor Indoor Indoor	Stationary Stationary Personal	Field Sample Field Sample Field Sample	N/A	1233 8	/7/2001 0.002 /4/2001 0.012		0.0000	0.0093	0	0 0.00484	< 0.00484	0 0	0.00484 <	0.00484	0 0	0.00484	< 0.00484	NK 0	0 < 0.00370 0 < 0.00480 0 < 0.00623
1R-07101 Hepa vacuum 1R-07181	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Export plant	Air	Indoor	Personal Stationary	Field Sample Field Sample	N/A	480 8	/4/2001 0.002 /4/2001 < 0.006 /6/2001 0.003		0.0000	0.0093	0	0 0.00486	< 0.00486	0 0	0.00486 <	0.00486	0 0	0.00486	Ü	NK 0	0 < 0.00490
1R-07381 1R-09059	303 W. Thomas St 303 W. Thomas St		Planer Bldg. EXP-2	Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1242 8	/7/2001 < 0.002 /5/2001 0.001		0.0000	0.0092	0	0 0.00481		0 0	0.00481 <		0 0	0.00481		0	0 < 0.00480
1R-09059 1R-09060	303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace	EXP-2 EXP-3	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	3512 9	/5/2001 0.001 /5/2001 0.001														
1R-09060 1R-09081	303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	3509 9	/5/2001 < 0.001 /5/2001 0.002														
1R-09082 1R-09082	303 W. Thomas St 303 W. Thomas St		EXP-5	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample		3192 9	/5/2001 0.002 /5/2001 0.001														
1R-09083 1R-09083 1R-09084 Labor - Removing roof	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St		EXP-6 EXP-6 Shoulder	Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	3298 9	/5/2001 0.001 /5/2001 < 0.001														
1R-09084 Labor - Removing roof 1R-09961 1R-09962	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air Air Air	Outdoor	Personal Stationary Stationary	Field Sample Field Sample Field Sample	N/A N/A N/A	2490 9	/5/2001 0.099 /6/2001 0.099												_	NK 0	0 < 0.00368 0 < 0.00365
1R-09962 1R-09963 1R-09964	303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	2485 9	/6/2001 /6/2001 /6/2001												Ü	NK 0	0 < 0.00369 0 < 0.00361
1R-09965 1R-09966	303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air	Outdoor Outdoor	Stationary	Field Sample Field Sample	N/A	2513 9	/6/2001 /6/2001												U	NK 0	0 < 0.00365 0 < 0.00365
1R-09978 Operate - Excavator 1R-09979 Operate - Excavator	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	N/A Outdoor	Personal Personal	Field Sample Field Sample	N/A	700 9	/7/2001 < 0.008 /7/2001 < 0.041		0.0000	0.0082	0	0 0.00426	< 0.00426	0 0	0.00426 <	0.00426	0 0	0.00426	< 0.00426 U	0 NK 0	0 < 0.00426 0 < 0.04522
1R-10042 1R-10043	303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace	EXP-2 EXP-3	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1170 9	/7/2001 /7/2001												U	NK 0	0 < 0.00451 0 < 0.00448
1R-10045 1R-10081	303 W. Thomas St 303 W. Thomas St	EXP-1	EXP-5 EXP-1	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	2787 9/	/7/2001 10/2001 0.002												Ü	NK 0	0 < 0.00445 0 < 0.00314
1R-10082 1R-10083 1R-10085	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-2 WRGrace EXP-5	EXP-2 EXP-3 EXP-5	Air Air Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	2723 9/	10/2001 0.001 10/2001 0 10/2001 0.002												U	NK 0 NK 0 NK 0	0 < 0.00315 0 < 0.00321 0 < 0.00320
1R-10090 Spray down 1R-10090 Spray down	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Outdoor	Stationary Personal Personal	Field Sample Field Sample Field Sample	N/A	765 9/	10/2001 0.002 10/2001 0.02 10/2001 0.064				1	1	0.00975							1 1	1 0.00975 0 < 0.06488
1R-10141 1R-10142	303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air	Outdoor Outdoor	Stationary	Field Sample Field Sample	N/A	1927 9/	11/2001 0 11/2001 0													NK 0	0 < 0.00476 0 < 0.00490
1R-10143 1R-10144	303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1833 9/	11/2001 0.002 11/2001 0.002												U	NK 0	0 < 0.00500 0 < 0.00501
1R-10145 1R-10146	303 W. Thomas St 303 W. Thomas St	EXP-6	EXP-5 EXP-6	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1088 9/	11/2001 0.002 11/2001 0.003												Ü	NK 0	0 < 0.00504 0 < 0.00337
1R-10147 1R-10150 Removing sheet metal	303 W. Thomas St 303 W. Thomas St	Property	EXP-7 Shoulder EXP-decon (clean room)	Air Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A N/A	737 9/	11/2001 0.002 11/2001 0.043				3	3	0.02700						U	NK 0	0 < 0.00508 3 0.02700
1R-10152 1R-10153 1R-10156	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room NAFU EXP-1	EXP-decon (clean room)  EXP-NAFU  EXP-1	Air Air Air	Indoor Indoor Outdoor	Stationary Stationary	Field Sample Field Sample Field Sample	N/A N/A N/A	1906 9/	11/2001 0.01 11/2001 0.002 12/2001 0.002		0.0007	0.0115	0	1 0.00385	0.00385	0 0	0.00385 < 0.00275	0.00385	0 0	0.00385 0.00275	< 0.00385	NK 0	0 < 0.00466 1 0.00385 0 < 0.00275
1R-10156 1R-10157 1R-10158	303 W. Thomas St 303 W. Thomas St	EXP-2	EXP-2 EXP-3	Air Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample	N/A	1310 9/	12/2001 0.002 12/2001 0.002 12/2001 0.002					0.00275 0.00466 0.00469			0.00275 0.00466 0.00469			0.00275 0.00466 0.00469		0	0 < 0.00275 0 < 0.00466 0 < 0.00469
1R-10159 1R-10161	303 W. Thomas St 303 W. Thomas St	EXP-4	EXP-4 EXP-6	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1324 9/	12/2001 0.002 12/2001 0.002		0.0008	0.0138	0	1 0.00462 0.00407	0.00241		0.00462 0.00407			0.00462 0.00407		0	1 0.00241
1R-10162 1R-10163	303 W. Thomas St 303 W. Thomas St	Planer Building	EXP-7 B/W Planer/longshed	Air Air	Outdoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A	1321 9/	12/2001 0.002 12/2001 0.002					0.00463			0.00463			0.00463	U	0 NK 0	0 < 0.00407 0 < 0.00463 0 < 0.00425
1R-10164 1R-10167 Watering	303 W. Thomas St 303 W. Thomas St	Property	B/W Planer/longshed Shoulder	Air Air	Indoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A N/A	1398 9/ 690 9/	12/2001 < 0.002 12/2001	Overloaded			0	0	< 0	0 0	<	0	0 0		< 0	NK 0	0 < 0.00427
1R-10167 Watering 1R-10170	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St		Shoulder  EXP-NAFU  EXP-Clean Room	Air	Outdoor Outdoor	Personal Stationary	Field Sample Field Sample	N/A	944 9/	12/2001 < 0.105 12/2001 < 0.003		0.0002	0.2236	0	0 0.11639	< 0.11639	13 0	0.11639	1.51309	0 0	0.11639	U	13 NK 0	0 1.51309 0 < 0.00520
1R-10171 1R-10096 1R-10097	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Planer Building	Northeast Corner of Planer Bldg.  Southeast Corner of Planer Bldg.	Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample		1453 9/	12/2001 0.008 13/2001 0.002 13/2001 0.006												Ü	NK 0 NK 0 NK 0	0 < 0.00438 0 < 0.00411 0 < 0.00413
1R-10097 1R-10098 Drive - Truck 1R-10101 Follow trucks	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St		Shoulder Shoulder	Air Air	Outdoor	Personal Personal	Field Sample Field Sample Field Sample	N/A	716 9/	13/2001 0.006 13/2001 0.058 13/2001 0.13		0.0019	0.0040	0	7 0.00051	0.03242		0.00051			0.00051		NK 0	7 0.03242 0 < 0.09327
1R-10172 1R-10173	303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1398 9/	13/2001 0.003 13/2001 0				0	0	< 0.00415							NK 0	0 < 0.00417 0 < 0.00415
1R-10174 1R-10175	303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1442 9/ 1455 9/	13/2001 0 13/2001 0												U	NK 0	0 < 0.00405 0 < 0.00401
1R-10176 1R-10177	303 W. Thomas St 303 W. Thomas St	EXP-6	EXP-5 EXP-6	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1418 9/	13/2001 0 13/2001 0												U	NK 0	0 < 0.00399 0 < 0.00411
1R-10178 1R-10179	303 W. Thomas St 303 W. Thomas St	NAFU	EXP-NAFU	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1651 9/	13/2001 0 13/2001 0.013												U	NK 0	0 < 0.00413 0 < 0.00452
1R-10180 1R-10109 1R-10110	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room	EXP-Clean room EXP-clean room EXP-NAFU	Air Air Air	Indoor Indoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A	1575 9/	13/2001 0.058 14/2001 0.043 14/2001 0.005					0.00474			0.00474			0.00474		NK 0	0 < 0.00450 0 < 0 0 < 0.00467
1R-10110 1R-10111 1R-10112	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Planer Building	Northeast Corner of Planer Bldg.  Southeast Corner of Planer Bldg.	Air Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A	1494 9/	14/2001 0.005 14/2001 0.002 14/2001 < 0.002												Ú	NK 0	0 < 0.00467 0 < 0.00400 0 < 0.00422
1R-10115 Operate - Excavator 1R-10118 Follow trucks	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A N/A	686 9/ 62 9/	14/2001 0.011 14/2001 0.119				2	2	0.02010						U	2 NK 0	2 0.02010
1R-10119 1R-10120	303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	EXP-Clean room EXP-NAFU	Air Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1479 9/ 1490 9/	17/2001 0.053 17/2001 0.007												U	NK 0	0 < 0.04814 0 < 0.00404 0 < 0.00401
1R-10552 Watering down 1R-10564 Drive - Truck	303 W. Thomas St 303 W. Thomas St	Property	Shoulder Shoulder	Air Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A	686 9/	17/2001 0.021 18/2001 0.081		0.0020	0.0042	4	3 0.00054	0.03384		0.00054			0.00054	U	NK 0	0 < 0.00458 3 0.03384
1R-10567 1R-10568	303 W. Thomas St 303 W. Thomas St	NAFU	EXP-clean room EXP-NAFU EXP-clean room	Air Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1548 9/	18/2001 0.052 18/2001 0.022						0.00470							NK 0	0 < 0.00478 0 < 0.00482
1R-10578 1R-10579 1R-10580 Watering debris	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room NAFU Property	EXP-clean room  EXP-NAFU  Shoulder	Air Air	Indoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	1579 9/	19/2001 0.011 19/2001 0.005 19/2001 0.012		0.0004	0.0042	1	0 0000	0.00473		0.00040			0.00010	U	NK 0	0 0.00473 0 < 0.00473
1R-10580 Watering debris 1R-10673 1R-10674	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room	EXP-clean room EXP-NAFU	Air Air Air	Indoor Outdoor	Personal Stationary Stationary	Field Sample Field Sample Field Sample	N/A	1594 9/	19/2001 0.012 20/2001 0.051 20/2001 0.004		0.0001	0.0012	0	1 0.00040	0.00404		0.00040			0.00040		0 NK 0 NK 0	1 0.00404 0 < 0.00468 0 < 0.00467 1 0.01286
1R-10674 1R-10675 Decon wash	303 W. Thomas St 303 W. Thomas St		Shoulder	Air Air	Outdoor	Personal	Field Sample Field Sample	N/A N/A		20/2001 0.004 20/2001 0.023	$\pm$	0.0005	0.0020	2	1 0.00043	0.01286		0.00043			0.00043	0	2	1 0.01286

										PCM (METHOD NIOSH 7400)							AHERA / ASTM	755				
										NIOSH 7400)	ľ	Poisson Concentr Interval (90% Co	nfidence Interval	e I			AREKA / ASIM	755				
											Filter Status	on Conce	entration)		Libby Amphiboles (	LA)	Chrysotile (	(Asb conc	Other Amphiboles ( OA )		Total Asbestos	
	December Comm			Madia				Pre Vol (air=L)/	,		Non Analyzed				Analytical Sensitivity (Air = S/cc) or	(Air = S/cc) or (Dust =	Analytica Sensitivity (Air = S/cc)	(Air = S/cc) or (Dust =	Analytical Sensitivity (Air = S/cc) or S/cc) or			Asb conc (Air = S/cc) or
Sample ID Task 1R-10687	Property Group (Location)	Sample Group	Location Description (Sub Location)	Type	Matrix	Sample Type Stationary	Category Field Sample	Clear (dust=cm²)	9/21/2001	Fibers/CC 0.038		Lower Bound	Upper Bound	S<5u	S>5u (Dust = S/cm <sup>2</sup> )	S/cm <sup>2</sup> )	S<5u S>5u (Dust = S/cr		S>5u (Dust = S/cm <sup>2</sup> ) (Dust = S/cm <sup>2</sup>	Type Identified		(Dust = S/cm <sup>2</sup> ) 0 < 0.00492
1R-10688 1R-10689 Watering debris	303 W. Thomas St 303 W. Thomas St	NAFU Property	EXP-NAFU Shoulder	Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A 1515 N/A 716		0.004 0.011		0.0002	0.0037	0	1 0.0012	3 0.00492	0.00	23	0.00123	UNK	0 1	0.00492 0 < 0.00463
1R-10721 1R-10722	303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	EXP-clean room EXP-NAFU	Air Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1470 N/A 1476	9/22/2001 9/22/2001	0.062 0.007										UNK UNK	0 0	0.00406
1R-10723 Decon wash 1R-10735 1R-10736	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Clean Room NAFU	Shoulder  EXP-clean room  EXP-NAFU	Air Air Air	Outdoor Indoor Outdoor	Personal Stationary Stationary	Field Sample Field Sample Field Sample	N/A 657 N/A 1403 N/A 1372	9/22/2001 9/24/2001 9/24/2001	0.038 0.1 0.008		0.0001	0.0025	7	3 1 0.0008	0.04543 5 0.00426	0.00	085	0.00085	UNK		0.04543 0.00426 0 < 0.00435
1R-10736 1R-10737 1R-10738	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Planer Building Planer Building	EXP-Northeast planer shed  EXP-Southeast planer shed	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1372 N/A 1397 N/A 1385	9/24/2001 9/24/2001 9/24/2001	< 0.005										UNK	0 0	0 < 0.00427
1R-10739 Drive - Truck 1R-10751	303 W. Thomas St 303 W. Thomas St	Property Clean Room	Shoulder EXP-clean room	Air Air	Outdoor Indoor	Personal Stationary	Field Sample Field Sample	N/A 763 N/A 1525	9/24/2001 9/25/2001	0.186 0.012		0.0078 0.0013	0.0096 0.0058	8	11 0.0006 2 0.0012		0.00		0.00061 0.00122		8 11 1 2	0.09290 0.01468
1R-10752 1R-10753 1R-10754	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	NAFU Planer Building Planer Building	EXP-NAFU EXP-Northeast planer shed EXP-Southeast planer shed	Air Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1420 N/A 1406	9/25/2001 9/25/2001	0.005 < 0.002		0.0001	0.0025	0	1 0.0008	4 0.00420	0.00	084	0.00084	UNK		0.00420 0 < 0.00425
1R-10754 1R-10755 Watering debris 1R-11207	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property  Clean Room	Shoulder  EXP-clean room	Air Air Air	Outdoor	Stationary Personal Stationary	Field Sample Field Sample Field Sample	N/A 1406 N/A 636 N/A 1536	9/25/2001 9/25/2001 9/26/2001	< 0.002 0.006 0.057		0.0001 0.0002	0.0014 0.0036	0	1 0.0004 1 0.0012		0.00		0.00047 0.00121	UNK	0 1	0.00425 0 < 0.00425 1 0.00469 1 0.00486
1R-11208 1R-11209	303 W. Thomas St 303 W. Thomas St	NAFU Planer Building	EXP-NAFU EXP-Northeast planer shed	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1400 N/A 1233	9/26/2001 9/26/2001	0.005		0.0002	0.0030		0.0012	0.00400	0.00	21	0.00121	UNK	0 0	0.00486 0 < 0.00426 0 < 0.00484
1R-11210 1R-11211 Wash Truck	303 W. Thomas St 303 W. Thomas St	Planer Building Property	EXP-Southeast planer shed Shoulder	Air Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A 1233 N/A 667	9/26/2001 9/26/2001	0.002 0.021		0.0006	0.0026	2	1 0.0005	5 0.01492	0.00	055	0.00055	UNK	2 1	0 < 0.00484 0.01492
1R-11223 1R-11224 1R-11225	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room NAFU Planer Building	Clean room NAFU EXP-Northeast planer shed	Air Air Air	Indoor Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 1390 N/A 1380 N/A 1252	9/27/2001 9/27/2001 9/27/2001	0.015 0.004 < 0.002										UNK UNK UNK	0 0	0 < 0.00430 0 < 0.00433 0 < 0.00477
1R-11226 1R-11227 Watering debris	303 W. Thomas St 303 W. Thomas St	Planer Building Property	EXP-Southeast planer shed Shoulder	Air	Outdoor	Stationary Personal	Field Sample Field Sample	N/A 1258 N/A 649	9/27/2001 9/27/2001	< 0.002				0	1	0.00461				UNK		0.00477 0 < 0.00474 1 0.00461
1R-11237 1R-11238	303 W. Thomas St 303 W. Thomas St	Planer Building Planer Building	North side of Planer Bldg. South side of Planer Bldg.	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1352 N/A 1355	9/28/2001 9/28/2001	< 0.002 0.002										UNK UNK	0 0	0 < 0.00442 0 < 0.00441 0 < 0.00443
1R-11239 1R-11240	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room NAFU Auto	Clean room in decon trailer Outside in exhaust of NAFU Cab of excavator	Air Air	Indoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1346 N/A 1360	9/28/2001 9/28/2001	0.076 < 0.002										UNK	0 0	c 0.00439
1R-11263 Operate - Excavator 1R-11273 1R-11274	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	Clean room  NAFU	Air Air Air	Indoor Outdoor	Personal Stationary Stationary	Field Sample Field Sample Field Sample	N/A 713 N/A 1213 N/A 1202	9/28/2001 9/29/2001 9/29/2001	0.004 0.028 < 0.002										UNK UNK UNK	0 0	0 < 0.00465 0 < 0.00492 0 < 0.00497
1R-11275 1R-11276	303 W. Thomas St 303 W. Thomas St	Planer Building Planer Building	North side of Planer Bldg. South side of Planer Bldg.	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1267 N/A 1269	9/29/2001 9/29/2001	< 0.002 < 0.002 0.002										UNK	0 0	0 < 0.00471
1R-11277 Drive - Truck 1R-11479	303 W. Thomas St 303 W. Thomas St	Auto Property	Cab of Truck Work area in E2	Air Air	Outdoor Outdoor	Personal Stationary	Field Sample Field Sample	N/A 858 N/A 622	9/29/2001 10/1/2001	0.016	overloaded			0	0	< 0.00480				UNK	0 0	0 < 0.00480
1R-11482 1R-11483	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room NAFU Clean Room	Clean room-export plant In exhaust of NAFU Clean room in CRZ	Air Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1359 N/A 1385	10/1/2001 10/1/2001	0.031 0.005										UNK	0	0 < 0.00439 0 < 0.00431
1R-11494 1R-11495 1R-11496 Drive - Truck	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	NAFU Property	In the flow of the exhaust of NAFU In cab of haul truck	Air Air Air	Indoor Outdoor Indoor	Stationary Stationary Personal	Field Sample Field Sample Field Sample	N/A 1487 N/A 1487 N/A 1373	10/2/2001 10/2/2001 10/2/2001	0.018 0.003 0.011										UNK UNK UNK	0 0	0 < 0.00431
1R-11511 1R-11512	303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	Clean room in CRZ trailer In exhaust of NAFU	Air	Indoor	Stationary Stationary	Field Sample Field Sample	N/A 1487 N/A 1482	10/3/2001	0.03										UNK	0 0	0 < 0.00435 0 < 0.00401 0 < 0.00403
1R-11513 Decon trucks 1R-11526	303 W. Thomas St 303 W. Thomas St	Property Clean Room	Decon area Clean room in CRZ	Air Air	Outdoor Indoor	Personal Stationary	Field Sample Field Sample	N/A 679 N/A 1465	10/3/2001 10/4/2001	0.051 0.01		0.0009	0.0030	1	3 0.0005	4 0.01954	0.00	054	0.00054	UNK	1 3 0 0	0.01954 0 < 0.00407
1R-11527 1R-11528 Operate - Excavator 1R-11583 Drive - Truck	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	NAFU Auto	In exhaust of NAFU  Cab of excavator	Air Air	Outdoor	Stationary Personal	Field Sample Field Sample	N/A 1424 N/A 770	10/4/2001 10/4/2001	< 0.002 0.019		0.0003	0.0024	0	2 0.0006	1 0.00969	0.00	061	0.00061	UNK	0 2	0.00419
1R-11583 Drive - Truck 1R-11586 1R-11587	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Auto Clean Room NAFU	Cab of haul truck Clean room in CRZ In exhaust of NAFU	Air Air Air	Outdoor Indoor Outdoor	Personal Stationary Stationary	Field Sample Field Sample Field Sample	N/A 876 N/A 1239 N/A 1463	10/5/2001 10/5/2001 10/5/2001	0.012										UNK	0 0	
1R-11596 Drive - Haul truck 1R-11597	303 W. Thomas St 303 W. Thomas St	Auto Clean Room	Cab of haul truck Clean room in CRZ	Air	Outdoor	Personal Stationary	Field Sample Field Sample	N/A 788 N/A 1579	10/8/2001 10/8/2001	0.041		0.0000	0.0091	0	0 0.0047	3 < 0.00473	0 0 0.00	73 < 0.00473	0 0 0.00473 < 0.00473	UNK		0 < 0.00470
1R-11598 1R-11651 Decon of haul trucks	303 W. Thomas St 303 W. Thomas St	NAFU Property	In exhaust of NAFU Shoulder	Air Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A 1573 N/A 821	10/8/2001 10/9/2001	0.012 0.059		0.0000	0.0087	0	0 0.0045	4 < 0.00454	0 0 0.00	154 < 0.00454	0 0 0.00454 < 0.00454	UNK	0 0	0 < 0.00450
1R-11652 1R-11653	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room NAFU Property	Clean room in CRZ trailer In exhaust of NAFU At a residence on the Northwest side of site	Air Air	Indoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1479 N/A 1473	10/9/2001 10/9/2001	0.049										UNK	0 0	1
1R-11658 1R-11627 1R-11628	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Clean Room NAFU	Clean room in CRZ trailer In exhaust of NAFU	Air Air Air	Indoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 1403 N/A 1282 N/A 1291	10/9/2001 10/10/2001 10/10/2001	0.004 0.012 0.005										UNK UNK UNK	0 0	
1R-11629 1R-11630 Drive - Truck	303 W. Thomas St 303 W. Thomas St	Property Auto	Back porch of residence on the Northwest side of Cab of haul truck	Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A 1348 N/A 693	10/10/2001 10/10/2001	0.004 0.083		0.0000	0.0092	0	0 0.0047	9 < 0.00479	0 0 0.00	179 < 0.00479	0 0 0.00479 < 0.00479	UNK	0 0	0 < 0.00480
1R-10795 1R-10796	303 W. Thomas St 303 W. Thomas St			Air Air	Indoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1720 N/A 1761	10/12/2001 10/12/2001		Overloaded									UNK UNK	0 0	0
1R-10797 1R-10798 1R-10799	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Planer Building	Planner building, SE side of building Planner building, lunch room Southwest side of Planer Bldg.	Air Air Air	Indoor Indoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 1761 N/A 1813 N/A 1813	10/12/2001 10/12/2001 10/12/2001		Overloaded									UNK UNK UNK	0 0	
1R-08931 1R-08932	303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1  EXP-2	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1285 N/A 1288	10/17/2001 10/17/2001 10/17/2001	< 0.002 < 0.002	Overloaded									UNK	0 0	0 < 0.00465 0 < 0.00463
1R-08933 1R-08934	303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4	EXP-3 EXP-4	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1285 N/A 1279	10/17/2001 10/17/2001	< 0.002 < 0.002										UNK	0 0	0.00465
1R-08935 1R-08936	303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6	EXP-5 EXP-6	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1279 N/A 1273	10/17/2001 10/17/2001	< 0.002 < 0.002			-							UNK	0 0	0 < 0.00467
1R-08937 1R-08938 1R-10824	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-7 EXP-8 Property	EXP-7 EXP-8 Northeast end of connex boxes	Air Air Air	Outdoor Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 1273 N/A 1276 N/A 1454	10/17/2001 10/17/2001 10/17/2001	< 0.002 < 0.002 0.003										UNK UNK UNK	0 0	0 < 0.00469 0 < 0.00468 0 < 0.00411
1R-10825 1R-10826	303 W. Thomas St 303 W. Thomas St	Property Property	East side of conex boxes across from NAFU Southeast end of conex boxes	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1454 N/A 1454		0.003										UNK	0 0	0.00411
1R-10827 1R-10830 Decon	303 W. Thomas St 303 W. Thomas St	Property Property	West side of conex boxes Shoulder	Air Air	Outdoor Indoor	Stationary Personal	Field Sample Field Sample	N/A 1454 N/A 461	10/17/2001 10/17/2001	< 0.002 0.028										UNK	0 0	0 < 0.00411 0 .01289 0 < 0.03640
1R-10831 Decon 1R-10833 Decon	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Outdoor	Personal Personal	Field Sample Field Sample	N/A 82 N/A 461	10/17/2001 10/17/2001	0.051 0.07				2	2	0.02578				UNK	0 0	0 < 0.03640 2 0.02578 1 0.03511
1R-10834 Decon 1R-12248 1R-12249	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Shoulder Northeast end of connex boxes East side of connex boxes	Air Air Air	Outdoor Outdoor Outdoor	Personal Stationary Stationary	Field Sample Field Sample Field Sample	N/A 85 N/A 1454 N/A 1454	10/17/2001 10/18/2001 10/18/2001	0.231 0.004 0.007		0.0006	0.0105	0	1 0.0035	1 0.03511	0.00	351	0.00351	UNK	0 0	0.03511 0 < 0.00411 0 < 0.00411
1R-12250 1R-12251	303 W. Thomas St 303 W. Thomas St	Property Property	Southeast end of connex boxes  West side of conex boxes	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1454 N/A 1454	10/18/2001 10/18/2001 10/18/2001	0.007 0.004 0.002										UNK	0 0	0 < 0.00411
1R-12254 Labor - cleaning 1R-12255 Labor - cleaning	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A 625 N/A 65	10/18/2001 10/18/2001	0.074 0.196		0.0021	0.0041	6	2 0.0004	8 0.03820	0.00	048	0.00048	UNK	6 2	0.03820
1R-12256 Labor - cleaning 1R-12257 Labor - cleaning	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A 623 N/A 67	10/18/2001 10/18/2001	0.158 0.194				6	0	0.02874				UNK	6 0 0 0	0.02874
1R-10836 1R-10837	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Perimeter East Perimeter Southeast Perimeter	Air Air	Outdoor Outdoor	tationary Perimet	Field Sample	N/A 1353 N/A 1344	10/19/2001 10/19/2001	0.003				2	0	0.00889				UNK	0 0	0.00441
1R-10838 1R-10839 1R-10840 Decon water	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Southeast Perimeter West Perimeter, decon pad Shoulder	Air Air Air	Outdoor Outdoor	tationary Perimet tationary Perimet Personal	Field Sample Field Sample Field Sample	N/A 1337 N/A 1331 N/A 544	10/19/2001 10/19/2001 10/19/2001	< 0.002 < 0.002 < 0.005		0.0005	0.0035	1 1	0 1 0.0009	0.00446 0 0.00897 0.00549	0.00	990	0.00090		1 0	0 0.00889 0 0.00446 1 0.00897 0 0.00549
1R-10843 Operato - Equipment 1R-10847	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Northwest Perimeter decon pad	Air Air	Outdoor Outdoor	Personal tationary Perimet	Field Sample	N/A 476 N/A 1356	10/19/2001 10/20/2001	0.007 0.003		0.0007	0.0030	2	1 0.0006		0.00	063	0.00063	UNK	2 1 0 0	0.01881
1R-10848 1R-10849	303 W. Thomas St 303 W. Thomas St	Property Property	East Perimeter decon pad Southeast Perimeter decon pad	Air Air	Outdoor Outdoor	tationary Perimet	Field Sample Field Sample	N/A 1334 N/A 1306	10/20/2001 10/20/2001	0.003 < 0.002										UNK	0 0	0 < 0.00447
1R-10850 1R-10853 Decon water 1R-10854 Operato - Equipment	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	West Perimeter Shoulder Shoulder	Air Air Air	Outdoor Outdoor Outdoor	tationary Perimet Personal Personal	Field Sample Field Sample	N/A 1306 N/A 779 N/A 725	10/20/2001 10/20/2001 10/20/2001	0.004		0.0007	0.0028	1	2 0.0006	0 0.01437 0.00915	0.00	060	0.00060	UNK	1 2	0.00457 0.01437 0.00915
1R-10854 Operato - Equipment 1R-10862 Operato - Equipment 1R-10869 Operato - Equipment	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Shoulder Shoulder	Air Air	N/A Outdoor	Personal Personal	Field Sample Field Sample Field Sample	N/A 462	10/20/2001 10/22/2001 10/23/2001	0.02 < 0.006 0.004		0.0018	0.0043	2	3 0.0006		0.00	061	0.00061	UNK	0 0	0.00915 0 < 0.00646 3 0.02949
1R-10869 Operato - Equipment  1R-10871 Drive - Fill truck # 08B502	303 W. Thomas St	Property	Shoulder	Air		Personal	Field Sample	N/A 759 N/A 967	10/23/2001	0.004	overloaded	0.0010	J.UU-13	3	0.0006	0.02043	0.00		0.00001	UNK	0 0	5.023-13

										PCM (METH													
										NIOSH 74	00)		ration Confidence	e				AHERA / ASTM 5755					
													onfidence Interval entration)	'	Libby Amphiboles ( I			Chrysotile ( C )		Other Amphiboles ( OA )		Total Asbestos	
											Filter Status Non				Analytical	Asb conc (Air = S/cc)		Analytical	Asb conc (Air = S/cc)	Analytical		Total Aspestos	
		Property Group			Media				Pre Vol (air=L)/ Post Area		Analyzed				Sensitivity (Air = S/cc) or	or (Dust =		Sensitivity (Air = S/cc) or	or (Dust =	Sensitivity (Air = S/cc) or S/cc) or	Туре		Asb conc (Air = S/cc) or
1R-12723 Operato - E	Task Equipment	(Location) 303 W. Thomas St	Sample Group Property	Location Description (Sub Location)  Shoulder	Type Air	Matrix Outdoor	Sample Type Personal	Category Field Sample	Clear         (dust=cm²)         Sample           N/A         777         10/24/2		С	Lower Bound	Upper Bound	S<5u	S>5u (Dust = S/cm <sup>2</sup> )	S/cm <sup>2</sup> )	S<5u	S>5u (Dust = S/cm <sup>2</sup> )	S/cm <sup>2</sup> ) S<5	u S>5u (Dust = S/cm <sup>2</sup> ) (Dust = S/cm <sup>2</sup>	UNK		(Dust = S/cm <sup>2</sup> ) 0 < 0.00442
1R-12725 Fill truck 1R-12745 Operato - E	Equipment	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A 832 10/24/2 Clear 677 10/25/2	2001 0.02											UNK	0 0	0 < 0.00413 0 < 0.00441
1R-12749 1R-12750		303 W. Thomas St 303 W. Thomas St	EXP-1 EXP-2	EXP-1 EXP-2	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	Clear 1704 10/25/2 Clear 1701 10/25/2	2001 0.004											UNK	0 0	0 < 0.00438 0 < 0.00439
1R-12751 1R-12752		303 W. Thomas St 303 W. Thomas St	WRGrace EXP-4 EXP-5	EXP-3 EXP-4 EXP-5	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	Clear 1717 10/25/2 Clear 1449 10/25/2	2001 0.002											UNK	0 0	0 < 0.00435 0 < 0.00412
1R-12753 1R-12754 1R-12755		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-5 EXP-6 EXP-7	EXP-5 EXP-6 EXP-7	Air Air Air	Outdoor Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	Clear 1717 10/25/2 Clear 1720 10/25/2 Clear 1720 10/25/2	2001 0.002											UNK UNK UNK	0 0	0 < 0.00435 0 < 0.00434 0 < 0.00434
1R-12756 1R-12756		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	EXP-8	EXP-8  Northwest side of Planer Bldg.	Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	Clear 1720 10/25/2 Clear 1732 10/25/2 Clear 1492 10/26/2	2001 < 0.002											UNK	0 0	0 < 0.00434 0 < 0.00431 0 < 0.00400
1R-12283 1R-12284		303 W. Thomas St 303 W. Thomas St	Planer Building	Northeast side of Planer Bldg. Southeast side of Planer Bldo.	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	Clear 1492 10/26/2 Clear 1483 10/26/2	2001 < 0.002											UNK	0 0	0 < 0.00400 0 < 0.00400 0 < 0.00403
1R-12285 1R-12286		303 W. Thomas St 303 W. Thomas St	Planer Building Planer Building	Planer Bldg. Lunch room Southwest side of Planer Bldg.	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	Clear 1483 10/26/2	2001 < 0.002											UNK	0 0	0 < 0.00403 0 < 0.00403
1R-12296 Vacuum 1R-12297 Vacuum		303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 797 11/1/2 N/A 57 11/1/2		overloaded	0.0009	0.0157		1 0.00524	0.05236		0.00524		0.00524	UNK		0 1 0.05236
1R-12299 Vacuum 1R-12300 Vacuum		303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 774 11/1/2 N/A 73 11/1/2	001 < 0.037	overloaded										UNK	0 0	0 < 0.04088
1R-11639 Vacuum/cle 1R-11640 Vacuum/cle 1R-12763 Vacuum/cle	cleaning	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 400 11/2/2 N/A 59 11/2/2	001 0.254	overloaded	0.0029	0.0198		2 0.00506	0.10117		0.00506		0.00506	UNK	0 2	0 0.10117
1R-12763 Vacuum/cle 1R-12764 Vacuum/cle 1R-12766	cleaning	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Planer Building	Shoulder Shoulder North end of Planer Bldg, under overhang	Air Air Air	Indoor Indoor Outdoor	Personal Personal Stationary	Field Sample Field Sample Field Sample	N/A 400 11/2/2 N/A 61 11/2/2 N/A 1285 11/2/2	001 0.76	overloaded	0.0028	0.0191		2 0.00489	0.19570		0.00489		0.00489	UNK		0 2 0.19570 0 < 0.00465
1R-12766 Vacuum/cle 1R-12768 Vacuum/cle	cleaning	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor	Personal Personal	Field Sample Field Sample Field Sample	N/A 1285 11/2/2 N/A 434 11/2/2 N/A 436 11/2/2	001	overloaded overloaded										UNK	0 0	0.00405
1R-12766 Vacuum/cie 1R-12769 1R-12770		303 W. Thomas St 303 W. Thomas St	Planer Building Planer Building	North end of Planer Bldg. under overhang East side of Planer Bldg. abt 12' from center of w	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 436 11/2/2 N/A 1457 11/3/2 N/A 1454 11/3/2	0.002	Sveridaded										UNK		0 < 0.00410 0 < 0.00411
1R-12771 1R-12772		303 W. Thomas St 303 W. Thomas St	Planer Building Property	South side of Planer Bldg, about 12' from centerof West side of Planer Bldg, about 12' from center o	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1454 11/3/2 N/A 1454 11/3/2	001 < 0.002 001 < 0.002											UNK	0 0	0 < 0.00411 0 < 0.00411
1R-12777 1R-12778		303 W. Thomas St 303 W. Thomas St	Planer Building Property	Clearance-1, center of planer room Clearance-2, west end of large room next to electr	Air Air	Indoor Indoor	Stationary Stationary	Field Sample Field Sample	Clear 1324 11/4/2 Clear 1334 11/4/2	001 0.004											UNK	0 0	0 < 0.00451 0 < 0.00447
1R-12779 1R-12780		303 W. Thomas St 303 W. Thomas St	Property Property	Clearance 3, north end of large room Clearance 4, Northeast end of large room	Air Air	Indoor Indoor	Stationary Stationary	Field Sample Field Sample	Clear 1314 11/4/2 Clear 1324 11/4/2	001 0.003											UNK UNK	0 0	0 < 0.00454 0 < 0.00451
1R-13385 1-04454 Planar set-u	t-up	303 W. Thomas St 303 W. Thomas St	Property Property	Clearance 5, Southeast end of large room Shoulder	Air Air	Indoor	Stationary Personal	Field Sample Field Sample	Clear 1314 11/4/2 N/A 105 11/8/2	001 < 0.026		0.0001	0.0546	0		< 0.02842	0		< 0.02842	0 0 0.02842 < 0.02842	UNK	0 0	0 < 0.00454 0 < 0.02842
1-04455 Planar oper 1-04456 Planar oper 1-04457 Wood pull-s	eration	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Shoulder Shoulder Shoulder	Air Air Air	Indoor Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 123 11/8/2 N/A 74 11/8/2 N/A 191 11/8/2	001 < 0.036					0.00243 0.00403 0.00156			0.00243 0.00403 0.00156		0.00243 0.00403 0.00156	UNK UNK UNK	0 0	0 < 0.02426 0 < 0.04033 0 < 0.01563
1-04457 Wood pull-s 1-04458 Wood pull-s 1-04462 Planar set-u	l-stacking	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor	Personal Personal	Field Sample Field Sample Field Sample	N/A 191 11/8/2 N/A 153 11/8/2 N/A 101 11/8/2	001 0.042					0.00195 0.00295			0.00156 0.00195 0.00295		0.00156 0.00195 0.00295	UNK UNK UNK	0 0	0 < 0.01951 0 < 0.02955
1-04463 Wood pull-s 1-04464 Wood pull-s	I-stacking	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Indoor	Personal Personal	Field Sample Field Sample	N/A 159 11/8/2 N/A 245 11/8/2	001 < 0.017					0.00188 0.00122			0.00188 0.00122		0.00188 0.00122	UNK	0 0	0 < 0.01877 0 < 0.01218
1-04465 Wood pull-s 1-04459 Planar set-u	I-stacking	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Indoor	Personal Personal	Field Sample Field Sample	N/A 149 11/8/2 N/A 84 11/9/2	001 0.063					0.00200 0.00355			0.00200 0.00355		0.00200 0.00355	UNK	0 0	0 < 0.02003 0 < 0.03553
1-04460 Wood pull-s 1-04461 Wood pull-s	I-stacking	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 245 11/9/2 N/A 205 11/9/2	0.041					0.00122 0.00146			0.00122 0.00146		0.00122 0.00146	UNK	0 0	0 < 0.01218 0 < 0.01456 0 < 0.03640
1-04468 Planar set-t 1-04469 Wood pull-s	I-stacking	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 82 11/9/2 N/A 183 11/9/2	001 0.026					0.00364 0.00163			0.00364 0.00163		0.00364 0.00163	UNK	0 0	0 < 0.01631
1-04472 Wood pull-s 1-04473 Wood pull-s	l-stacking	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Indoor	Personal Personal	Field Sample Field Sample	N/A 243 11/9/2 N/A 227 11/9/2	0.041					0.00123 0.00131			0.00123 0.00131		0.00123 0.00131	UNK	0 0	0 < 0.01228 0 < 0.01315
1-04474 Wood pull-s 1-04475 Wood pull-s 1-04476 Wood pull-s	I-stacking	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder Shoulder	Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 227 11/9/2 N/A 113 11/9/2 N/A 163 11/9/2	001 0.046					0.00131 0.00264 0.00183			0.00131 0.00264 0.00183		0.00131 0.00264 0.00183	UNK UNK UNK	0 0	0 < 0.01315 0 < 0.02641 0 < 0.01831
1-04476 Wood pulls 1-04477 Wood feed 1-04478 Planar set-u	d	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air Air	Indoor	Personal Personal Personal	Field Sample Field Sample Field Sample	N/A 163 11/9/2 N/A 48 11/9/2 N/A 80 11/12/2	0.061					0.00183 0.00622 0.00373			0.00183 0.00622 0.00373		0.00183 0.00622 0.00373	UNK	0 0	0 < 0.06218 0 < 0.03731
1-04479 Planar set-u 1-04480 Planar set-u	t-up	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Indoor	Personal Personal	Field Sample Field Sample	N/A 80 11/12/2 N/A 249 11/12/2	2001 0.138		0.0007	0.0112	0	1 0.00373 0.00120	0.03731		0.00373 0.00120		0.00373 0.00120	UNK	0 1	1 0.03731 0 < 0.01199
1-04481 Wood feed 1-04482 Wood feed		303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A 137 11/12/2 N/A 109 11/12/2	2001 0.272					0.00218 0.00274			0.00218 0.00274		0.00218 0.00274	UNK	0 0	0 < 0.02178 0 < 0.02738
1-04483 Planar set-t 1-04484 Wood pull-s	I-stacking	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Outdoor Indoor	Personal Personal	Field Sample Field Sample	N/A 86 11/12/2 N/A 92 11/12/2	2001 0.117					0.00347 0.00324			0.00347 0.00324		0.00347 0.00324	UNK	0 0	0 < 0.03470 0 < 0.03244 0 < 0.02350
1-04485 Wood pull-s 1-04486 Wood feed	d	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Outdoor	Personal Personal	Field Sample Field Sample	N/A 127 11/12/2 N/A 131 11/12/2	2001 0.234					0.00235 0.00228			0.00235 0.00228		0.00235 0.00228	UNK	0 0	) < 0.02350 ) < 0.02278
1-04571 Planar set-t 1-04572 Planar set-t 1-04573 Wood pull-s	t-up	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Shoulder Shoulder Shoulder	Air	Indoor Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 72 11/14/2 N/A 70 11/14/2 N/A 143 11/14/2	2001 0.053					0.00415 0.00426			0.00415 0.00426		0.00415 0.00426	UNK UNK UNK	0 0	0 < 0.02278 0 < 0.04145 0 < 0.04264
1-04573 Wood pull-s 1-04574 Wood feed 1-04575 Wood pull-s	d	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Shoulder Shoulder	Air Air Air	Outdoor	Personal Personal	Field Sample Field Sample	N/A 143 11/14/2 N/A 149 11/14/2 N/A 303 11/14/2	2001 0.056					0.00209 0.00200 0.00099			0.00209 0.00200 0.00099		0.00209 0.00200 0.00099	UNK	0 0	0 < 0.02087 0 < 0.02003 0 < 0.00988
1-04575 Wood pull-s 1-04576 Wood feed 1-04577 Wood pull-s	d	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Shoulder Shoulder	Air Air	Outdoor	Personal Personal	Field Sample Field Sample Field Sample	N/A 303 11/14/2 N/A 297 11/14/2 N/A 225 11/14/2	2001 0.015					0.00199 0.00100 0.00133			0.00099 0.00100 0.00133		0.00099 0.00100 0.00133	UNK	0 0	0 < 0.01005
1-04578 Planar set-u 1-04579 Wood feed	t-up d	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Outdoor	Personal Personal	Field Sample Field Sample	N/A 223 11/14/2 N/A 223 11/14/2 N/A 173 11/14/2	2001 0.043					0.00134 0.00173			0.00133 0.00134 0.00173		0.00133 0.00134 0.00173	UNK	0 0	0 < 0.01338
1-04580 Planar set-t 1R-13665 Operate - B	t-up Bobcat	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Outdoor	Personal Personal	Field Sample Field Sample	N/A 175 11/14/2 N/A 125 11/14/2	2001 0.063 2001 < 0.022		0.0004	0.0072	0	0.00171 1 0.00239			0.00171 0.00239		0.00171 0.00239	UNK	0 0	0 < 0.01725 0 < 0.01705 1 0.02388 0 < 0.02388
1R-13666 Labor 1R-13667		303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder 25' South of connex box	Air Air	Outdoor Outdoor	Personal Stationary	Field Sample Field Sample	N/A 125 11/14/2 N/A 598 11/14/2	2001 < 0.022 2001 < 0.005											UNK UNK	0 0	0.00499
1-04583 Planar set-u	t-up	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 100 11/15/2 N/A 82 11/15/2	2001 0.132					0.00298 0.00364			0.00298 0.00364		0.00298 0.00364	UNK	0 0	0 < 0.02984 0 < 0.03640
1-04585 Planar set-u 1-04586 Wood feed	ed .	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A 249 11/15/2 N/A 251 11/15/2	2001 0.087					0.00120 0.00119			0.00120 0.00119		0.00120 0.00119	UNK	0 0	0 < 0.01199 0 < 0.01189
1-04587 Planar set-t 1-04588 Wood feed 1-04589 Planar set-t	ed .	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Shoulder Shoulder Shoulder	Air Air Air	Outdoor Indoor Outdoor	Personal Personal	Field Sample Field Sample Field Sample	N/A 205 11/15/2 N/A 245 11/15/2 N/A 66 11/15/2	2001 0.048					0.00146 0.00122 0.00452			0.00146 0.00122 0.00452		0.00146 0.00122 0.00452	UNK UNK UNK		0 < 0.01456 0 < 0.01218 0 < 0.04522
1-04589 Planar Set-t 1-04590 Wood feed 1R-13670	ed .	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Shoulder 25' West of connex box	Air Air	Indoor Outdoor	Personal Personal Stationary	Field Sample Field Sample Field Sample	N/A 66 11/15/2 N/A 66 11/15/2 N/A 1466 11/15/2	2001 0.182					0.00452			0.00452		0.00452	UNK UNK		0 < 0.04522 0 < 0.04522 0 < 0.00407
1R-13670 1R-13671 1R-13672		303 W. Thomas St 303 W. Thomas St	Property Property	25' South of connex box 10' East of connex box	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1469 11/15/2 N/A 1473 11/15/2	2001 0.007											UNK	0 0	) < 0.00406 0 < 0.00405
1R-13673 1R-13676 Handling of	of equipment	303 W. Thomas St 303 W. Thomas St	Property Property	75' North of connex box Shoulder	Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A 1469 11/15/2 N/A 477 11/15/2	2001 0.007 2001 0.029		0.0004	0.0025	0	2 0.00063	0.01254		0.00063		0.00063	UNK	0 0	0 < 0.00406 0 < 0.00405 0 < 0.00406 2 0.01254 2 0.01275
1R-13677 Handling of 1-04593 Planar set-t	of equipment t-up	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Outdoor Indoor	Personal Personal	Field Sample Field Sample	N/A 469 11/15/2 N/A 66 11/16/2	2001 0.053 2001		0.0004	0.0025	0	2 0.00064 0.00452	0.01275		0.00064 0.00452		0.00064 0.00452	UNK	0 0	0.04522
1-04594 Planar set-u 1-04595 Wood pull-s	I-stacking	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 68 11/16/2 N/A 235 11/16/2	2001					0.00439 0.00127			0.00439 0.00127		0.00439 0.00127	UNK	0 0	0 < 0.04389 0 < 0.01270
1-04596 Wood feed 1-04597 Wood pull-s	l-stacking	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A 239 11/16/2 N/A 239 11/16/2	2001					0.00125 0.00125			0.00125 0.00125		0.00125 0.00125	UNK	0 0	0 < 0.01249 0 < 0.01249
1-04598 Wood feed 1-04599 Planar set-u	t-up	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 235 11/16/2 N/A 219 11/16/2 N/A 4407 42/5/2	2001					0.00127 0.00136			0.00127 0.00136		0.00127 0.00136	UNK	0 0	0 < 0.01270 0 < 0.01363
1-03597 1-03598 1-04088		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Planer Building Planer Building Planer Building	Planer Bldg. adjacent lunch room Planer Bldg. adjacent lunch room Adjacent lunch room entrance	Air Air	Indoor Indoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A 1407 12/5/2 N/A 1784 12/5/2 N/A 1589 12/7/2	0.023					0.00085 0.00105 0.00075			0.00085 0.00105 0.00075		0.00085 0.00105 0.00075	UNK UNK UNK	0 0	0 < 0.00424
1-04088 1-04242 1R-13869		303 W. Thomas St 303 W. Thomas St	Planer Building	Adjacent lunch room  Lunch room  Lunch room	Air Air Air	Indoor Indoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 1488 12/10/2 N/A 1542 1/4/20	2001 0.022		0.0000	0.0074	n	0.00080		n	0.00080	< 0.00387	0.00075 0.00080 0 0 0.00387 < 0.00387	UNK	0 0	0 < 0.00376 0 < 0.00401 0 < 0.00387
1R-13870 1R-13871		303 W. Thomas St 303 W. Thomas St		South wall West wall	Air	Indoor	Stationary Stationary	Field Sample	N/A 1616 1/4/20 N/A 1613 1/4/20	002					5.23007						UNK UNK	0 0	0 < 0.00387 0 < 0.00462 0 < 0.00463
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											PCM (METHOD NIOSH 7400)							AHERA/ASTM 5	755				
											NICOTI 1400)		Interval (90% Co	ration Confidence	e I			AILIA / AOTIN O	33				
												Filter Status	on Conce	entration)		Libby Amphiboles ( L	Asb conc	Chrysotile ( C	Asb conc	Other Amphiboles ( OA )		Total Asbestos	
		Property Group			Madia				Pre Vol (a	air=L)/		Non Analyzed				Analytical Sensitivity (Air = S/cc) or	(Air = S/cc) or (Dust =	Analytical Sensitivity (Air = S/cc) o	(Air = S/cc) or r (Dust =	Analytical Sensitivity Asb conc (Air (Air = S/cc) or S/cc) or	= Asbestos Type		Asb conc (Air = S/cc) or
Sample ID 1R-13872	Task	(Location)	Sample Group Planer Building	Location Description (Sub Location)  Planer room East side	Type	Matrix Indoor	Sample Type Stationary	Category Field Sample	Clear (dust	=cm <sup>2</sup> ) Sample Date 1/4/2002	e Fibers/CC		Lower Bound	Upper Bound	S<5u	S>5u (Dust = S/cm <sup>2</sup> )	S/cm <sup>2</sup> ) S	<5u S>5u (Dust = S/cm		S>5u (Dust = S/cm²) (Dust = S/cm	2) Identified		(Dust = S/cm <sup>2</sup> ) < 0.00462
1R-13881 1R-13882		303 W. Thomas St 303 W. Thomas St	Property Property	Lunch room South wall	Air Air	Indoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A 12 N/A 12	254 2/12/2002 274 2/12/2002											UNK	0 0	< 0.00476 < 0.00469
1R-13883 1R-13884		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	West wall East wall	Air Air	Indoor	Stationary Stationary	Field Sample Field Sample	N/A 13	303 2/12/2002 313 2/12/2002											UNK	0 0	< 0.00458 < 0.00455
1R-13911 1R-13912 1R-13913		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	North wall of Planer Bldg.  East wall of Planer Bldg.  South wall of Planer Bldg.	Air Air	Indoor Indoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	Clear 13	325 3/14/2002 309 3/14/2002 370 3/14/2002	0.003 < 0.002 < 0.002					0.00450 0.00456 0.00436		0.004 0.004 0.004	56	0.00450 0.00456 0.00436		0 0	< 0.00450 < 0.00456 < 0.00436
1R-13937 1R-13938		303 W. Thomas St 303 W. Thomas St	Property Property	West end South End	Air	Indoor	Stationary Stationary	Field Sample Field Sample	N/A 13	370 3/14/2002 353 4/12/2002 358 4/12/2002	< 0.002 < 0.002 < 0.002					0.00430 0.00441 0.00440		0.004	41	0.00436 0.00441 0.00440		0 0	< 0.00430 < 0.00441 < 0.00440
1R-13939 1R-13940		303 W. Thomas St 303 W. Thomas St	Property Property	East End North End	Air Air	Indoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A 13 N/A 13	367 4/12/2002 381 4/12/2002	< 0.002 < 0.002					0.00437 0.00432		0.004 0.004		0.00437 0.00432		0 0	< 0.00437 < 0.00432
1-06871 1-06872		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Northeast corner Southeast corner Southwest corner	Air Air	Indoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A 12	209 5/14/2002 200 5/14/2002	< 0.002					0.00494 0.00497		0.004 0.004	97	0.00494 0.00497		0 0	< 0.00494 < 0.00497
1-06873 1-06874 1R-13960		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Northwest corner  Northwest corner  W side NAFU exhaust	Air Air Air	Indoor Indoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 12	200 5/14/2002 200 5/14/2002 91 5/30/2002			0.0009	0.0149	1	0 0.00497 0.00497 0.00301		0.004 0.004 0.003	97	0.00497 0.00497 0.00301		0 0	0.00497 < 0.00497 < 0.00301
1R-13961 1R-13962		303 W. Thomas St 303 W. Thomas St	Property Property	N side E side	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 9	44 5/30/2002 50 5/30/2002	< 0.003 < 0.003					0.00316 0.00314		0.003	16	0.00316 0.00314		0 0	< 0.00316 < 0.00314
1R-13963 1R-13966	Cleaning planar	303 W. Thomas St 303 W. Thomas St	Property Property	S. side make up air Shoulder	Air Air	Indoor Indoor	Stationary Personal	Field Sample Field Sample	N/A 9 N/A 1	37 5/30/2002 74 5/30/2002	< 0.003 0.02					0.00319 0.01715		0.003 0.017	19 15	0.00319 0.01715		0 0	< 0.00319 < 0.01715
1R-13968	Cleaning planar	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air Air	Indoor	Personal Personal	Field Sample Field Sample	N/A 1	70 5/30/2002 74 5/30/2002 86 5/30/2002	< 0.038 0.023 0.045		0.0075	0.1277	0	0 1 0.04264 0.01715		0.042 0.017	15	0.04264 0.01715 0.04522		0 0	0.04264 < 0.01715 < 0.04522
1R-13969 1R-13801 1R-13970	Cleaning planar	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Shoulder Shoulder West NAFU exhaust	Air Air	Indoor Indoor Outdoor	Personal Personal Stationary	Field Sample Field Sample Field Sample	N/A 1	56 5/30/2002 53 5/31/2002 352 5/31/2002						0.04522 0.01951 0.00441		0.045 0.019 0.004	51	0.04522 0.01951 0.00441		0 0	< 0.04522 < 0.01951 < 0.00441
1R-13971 1R-13972		303 W. Thomas St 303 W. Thomas St	Property Property	North	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 13	365 5/31/2002 371 5/31/2002						0.00437 0.00435		0.004	37	0.00437 0.00435		0 0	< 0.00437 < 0.00435
	Cleaning planar	303 W. Thomas St 303 W. Thomas St	Property Property	South- makeup air Shoulder	Air Air	Indoor Indoor	Stationary Personal	Field Sample Field Sample	N/A 4	377 5/31/2002 54 5/31/2002	< 0.04					0.00433 0.00657		0.004 0.006	57	0.00433 0.00657		0 0	< 0.00433 < 0.00657
1R-13978	Cleaning planar	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Shoulder Shoulder Shoulder	Air Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 4	55 5/31/2002 62 5/31/2002			0.0081 0.0076	0.1376 0.1302	0	0 1 0.04592 0 1 0.04346		0.045 0.043		0.04592 0.04346			0.04592 0.04346
1R-13978 1R-13980 1R-13802	<b>3</b> 1	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder W side NAGU exhaust	Air Air Air	Indoor Indoor Outdoor	Personal Personal Stationary	Field Sample Field Sample Field Sample	N/A 1	62 5/31/2002 56 5/31/2002 551 6/3/2002	0.039 < 0.017 < 0.002	Overloaded	0.0034	0.0573	0	0 1 0.01913	0.01913	0.019		0.01913 0.00481		0 1	< 0 0.01913 < 0.00481
1R-13803 1R-13804		303 W. Thomas St 303 W. Thomas St	Property Property	N side E side	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 15	520 6/3/2002 523 6/3/2002	< 0.002 < 0.002 < 0.002					0.00491 0.00490		0.004	91	0.00491 0.00490		0 0	< 0.00491 < 0.00490
	Cleaning planar	303 W. Thomas St 303 W. Thomas St	Property Property	S side makeup air Shoulder	Air Air	Indoor Indoor	Stationary Personal	Field Sample Field Sample	N/A 4	668 6/3/2002 40 6/3/2002	< 0.002 0.055		0.0200	0.0477	2	0.00476 2 4 0.00678	0.04070	0.004	78	0.00476 0.00678		0 0	< 0.00476
1R-13810	Cleaning planar	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Indoor	Personal Personal	Field Sample Field Sample	N/A 6	37 6/3/2002 60 6/3/2002	0.074					0.09189 0.04974		0.091 0.049	74	0.09189 0.04974	LAC LAOA	3 1	0.64322 0.19897
1R-13812	Cleaning planar	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Shoulder Shoulder Shouler	Air Air	Indoor Indoor Indoor	Personal Personal	Field Sample Field Sample Field Sample	N/A 1	64 6/3/2002 99 6/3/2002 96 6/3/2002	< 0.042 0.027 < 0.014					0.04663 0.01500 0.01523		0.046 0.015 0.015	00	0.04663 0.01500 0.01523		0 4	< 0.04663 0.05999 < 0.01523
1R-13814	Cleaning planar	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Indoor	Personal Personal	Field Sample Field Sample	N/A 3	96 6/3/2002 06 6/4/2002 05 6/4/2002	< 0.009 < 0.009					0.00975 0.00979		3 3 0.009	75 0.05852	0.00975 0.00979	LAC	11 1	0.11742
1R-13817		303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 6	60 6/4/2002 62 6/4/2002	< 0.045 < 0.043					0.04974 0.04814		0.049 0.048	14	0.04974 0.04814		0 0	< 0.04974 < 0.04814
1R-13818 1R-13819 1R-13820		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	W. side NAFU exhaust N. Side E. Side	Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 12	295 6/4/2002 268 6/4/2002	< 0.002 < 0.002					0.00461 0.00471		0.004 0.004 0.004	71	0.00461 0.00471 0.00470		0 0	< 0.00461 < 0.00471
1R-13984 1R-13987		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	S. side makeup air  Planar room by electrical panel	Air Air Air	Indoor Indoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 12	271 6/4/2002 256 6/4/2002 258 6/4/2002	< 0.002 < 0.002 < 0.002					0.00470 0.00475 0.00474		0.004 0.004 0.004	75	0.00470 0.00475 0.00474		0 0	< 0.00470 < 0.00475 < 0.00474
1R-13988 1R-13989		303 W. Thomas St 303 W. Thomas St	Property Property	Planar room by outfeed table Planar room by infeed table Planar room by infeed table	Air	Indoor	Stationary Stationary	Field Sample Field Sample	Clear 12	258 6/4/2002 258 6/4/2002	< 0.002 < 0.002 < 0.002					0.00474 0.00474 0.00474		0.004	74	0.00474 0.00474		0 0	< 0.00474 < 0.00474
1R-13990 1R-13991		303 W. Thomas St 303 W. Thomas St	Property Property	Table room Table room	Air Air	Indoor Indoor	Stationary Stationary	Field Sample Field Sample	Clear 12 Clear 12	258 6/4/2002 258 6/4/2002	< 0.002 < 0.002					0.00474 0.00474		0.004 0.004	74 74	0.00474 0.00474		0 0	< 0.00474 < 0.00474
1R-14140 1R-14141 1R-14142		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	W end S end E end	Air Air Air	Indoor Indoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A 12	233 7/9/2002 215 7/9/2002	< 0.002 < 0.002					0.00484 0.00491		0.004 0.004	91	0.00484 0.00491 0.00480		0 0	< 0.00484 < 0.00491 < 0.00480
1R-14143 1R-14264		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	N end W end	Air Air	Indoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 12	243 7/9/2002 242 7/9/2002 524 8/2/2002	< 0.002 < 0.002 < 0.002					0.00480 0.00481 0.00490		0.004 0.004 0.004	81	0.00480 0.00481 0.00490		0 0	< 0.00480 < 0.00481 < 0.00490
1R-14265 1R-14266		303 W. Thomas St 303 W. Thomas St	Property Property	S. end E. end	Air	Indoor	Stationary Stationary	Field Sample Field Sample	N/A 15	539 8/2/2002 532 8/2/2002	< 0.002					0.00484 0.00487		0.004 0.004	84	0.00484 0.00487		0 0	< 0.00485 < 0.00487
1-07209 1-07210		303 W. Thomas St 303 W. Thomas St	Building Building	North side East side	Air Air	Indoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A 12 N/A 12	289 9/7/2002 289 9/7/2002						0.00463 0.00463		0.004 0.004	63	0.00463 0.00463		0 0	< 0.00463 < 0.00463
1-07231 1-07232		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Building Building Building	South side West side	Air Air	Indoor	Stationary Stationary	Field Sample Field Sample	N/A 12	284 9/7/2002 284 9/7/2002						0.00465 0.00465		0.004 0.004	65	0.00465 0.00465		0 0	< 0.00465 < 0.00465 < 0.00477
1R-15861 1R-15862 1R-15863		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Building Building Building	Planer bit storage room  Center of large containment  West end of large containment	Air Air Air	Indoor Indoor Indoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	Pre 12	252 10/5/2002 234 10/5/2002 261 10/5/2002						0.00477 0.00484 0.00473		0.004 0.004 0.004	84	0.00477 0.00484 0.00473		0 0	< 0.00477 < 0.00484 < 0.00473
1R-15864 1R-15865		303 W. Thomas St 303 W. Thomas St	Building Building	South end of large containment  North west corner of large containment	Air	Indoor	Stationary Stationary	Field Sample Field Sample	Pre 12	225 10/5/2002 206 10/5/2002			0.0000 0.0000	0.0094 0.0095	0	0 0.00487 0 0 0.00495	< 0.00487 < 0.00495	0 0 0.004	87 < 0.00487 95 < 0.00495	0 0 0.00487 < 0.00487 0 0 0.00495 < 0.00495		0 0	< 0.00487 < 0.00495
1R-15801 1R-15802		303 W. Thomas St 303 W. Thomas St	Property Property	North end of planar bldg; Make up air West side of planar bldg under NAFU	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 13 N/A 13	386 10/7/2002 379 10/7/2002						0.00431 0.00433		0.004 0.004	33	0.00431 0.00433		0 0	< 0.00431 < 0.00433
1R-15803 1R-15806	Hepa vac/wiping down	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Building Building	South side of planar bldg under NAFU Shoulder Shoulder	Air Air Air	Outdoor Indoor Indoor	Stationary Personal	Field Sample Field Sample	N/A 3	379 10/7/2002 44 10/7/2002 16 10/8/2002	0.166					0.00433		0.004	33	0.00433			< 0.00433
	Hepa vac/wiping down	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Building Building Property	Shoulder Shoulder North end of plant building makeup area	Air Air	Indoor Indoor Outdoor	Personal Personal Stationary	Field Sample Field Sample Field Sample	N/A	16 10/8/2002 70 10/8/2002 477 10/8/2002	0.238					0.02719		0.027	19	0.02719		0 0	< 0.02719
1R-15814 1R-15815		303 W. Thomas St 303 W. Thomas St	Property Property	North end of plant building makeup area West side of plant building under NAFU	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 14	177 10/8/2002 168 10/8/2002		Overloaded				0.00407		0.004		0.00407		0 0	< 0.02719 < 0 < 0.00407 < 0.00409
1R-15816 1R-15742		303 W. Thomas St 303 W. Thomas St	Property Property	South side of plant building under NAFU  N. Planner Bldg. makeup	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 13	159 10/8/2002 335 10/9/2002						0.00409 0.00447		0.004 0.004	47	0.00409 0.00447		0 0	< 0.00447
1R-15743 1R-15744		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	W. planer bldg. NAFU exhaust S. Planer bldg. NAFU exhaust Shoulder	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 14	108 10/9/2002 108 10/9/2002						0.00424 0.00424		0.004 0.004		0.00424 0.00424			< 0.00424 < 0.00424
1R-15745 1R-15746 1R-15747	Cleaning	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Building Building Building	Shoulder Shoulder	Air Air Air	Indoor Indoor Indoor	Personal Personal	Field Sample Field Sample Field Sample	N/A 3	62 10/9/2002 29 10/9/2002 65 10/9/2002	0.031												
1R-15752 1R-15757	Cleaning	303 W. Thomas St 303 W. Thomas St	Building Property	Shoulder  North planer building makeup	Air Air	Indoor Outdoor	Personal Personal Stationary	Field Sample Field Sample	N/A 3 N/A 12	37 10/10/2002	0.362					0.00484		0.004	84	0.00484		0 0	< 0.00484
1R-15758 1R-15759		303 W. Thomas St 303 W. Thomas St	Property Property	West planer building NAFU exhaust South planer building NAFU exhaust	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 12 N/A 12	210 10/10/2002 239 10/10/2002	!					0.00493 0.00482		0.004 0.004	93 82	0.00493 0.00482		0 0	< 0.00493 < 0.00482 < 0.00474
1R-15882 1R-15883		303 W. Thomas St 303 W. Thomas St	Building Building	N.E. corner; West containment Center west containment	Air Air	Indoor Indoor	Stationary Stationary	Field Sample Field Sample	Clear 12	260 10/11/2002 260 10/11/2002	!					0.00474 0.00474		0.004 0.004	74	0.00474 0.00474		0 0	< 0.00474
1R-15884 1R-15885 1R-15886		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Building Building Building	S.E. corner; West containment N.W. corner; West containment S.W. corner; West containment	Air Air Air	Indoor Indoor Indoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	Clear 12	260 10/11/2002 260 10/11/2002 229 10/11/2002	!					0.00474 0.00474 0.00486		0.004 0.004 0.004	74	0.00474 0.00474 0.00486	LAOA	1 2	< 0.00474 0.01421 < 0.00486
1R-15889 1R-15890	Cleaning Cleaning	303 W. Thomas St 303 W. Thomas St	Building Building	Shoulder Shoulder	Air Air	Indoor Indoor	Personal Personal	Field Sample Field Sample	N/A 3	62 10/11/2002 63 10/11/2002	0.014					0.00400		0.004		0.00460		0 0	- 0.00+00
1R-15891 1R-15894	Cleaning	303 W. Thomas St 303 W. Thomas St	Building Property	Shoulder Makeup N planer building	Air Air	Indoor Outdoor	Personal Stationary	Field Sample Field Sample	N/A 1 N/A 12	66 10/11/2002 254 10/11/2002	! < 0.016 !					0.00476		0.004		0.00476		0 0	< 0.00476
1R-15895 1R-15896		303 W. Thomas St 303 W. Thomas St	Property Property	NAFU exhaust; West planer building NAFU exhaust; South planer building	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 13 N/A 12	326 10/11/2002 254 10/11/2002	!					0.00450 0.00476		0.004 0.004	50 76	0.00450 0.00476		0 0	< 0.00450 < 0.00476
1R-15899 1R-15900		303 W. Thomas St 303 W. Thomas St	Building Building	S.E. corner; Tool room Center tool room	Air Air	Indoor Indoor	Stationary Stationary	Field Sample Field Sample	Clear 12 Clear 12	260 10/11/2002 260 10/11/2002						0.00474 0.00474		0.004 0.004		0.00474 0.00474		0 0	< 0.00474 < 0.00474

											METHOD -													
										NIO	SH 7400)		entration Confidence	ce				AHERA / ASTM 5755						
													oncentration)		Libby Amphiboles ( I	LA)		Chrysotile ( C )		Other Amphibo	les ( OA )		Total Asbestos	
											Filter :	Status			Analytical	Asb conc (Air = S/cc)		Analytical	Asb conc (Air = S/cc)	Analyt				
		Property Group			Media				Pre Vol (air=L)/ Post Area		Anal				Sensitivity (Air = S/cc) or	Or (Dust =		Sensitivity (Air = S/cc) or	Or (Dust =	Sensiti (Air = S/o	c) or S/cc) or	Туре		Asb conc (Air = S/cc) or
Sample ID 1R-15901	Task	(Location) 303 W. Thomas St	Sample Group Building	N.E. corner tool room	<b>Type</b> Air	Matrix Indoor	Sample Type Stationary	Category Field Sample	Clear 1260 10	/11/2002	pers/CC	Lower Bou	d Upper Bound	S<5u	S>5u (Dust = S/cm²) 0.00474		S<5u	S>5u (Dust = S/cm²) 0.00474	S/cm <sup>2</sup> )		00474	dentified		(Dust = S/cm <sup>2</sup> ) 0 < 0.00474
1R-15902 1R-15903		303 W. Thomas St 303 W. Thomas St	Building Building	N.W. corner tool room S.W. corner tool room	Air Air	Indoor Indoor	Stationary Stationary	Field Sample Field Sample	Clear 1260 10	/11/2002 /11/2002					0.00474 0.00474			0.00474 0.00474		C	00474 00474		0 0	0 < 0.00474 0 < 0.00474
1R-15904 1R-15905		303 W. Thomas St 303 W. Thomas St	Building Building	S.W. corner E. comtainment S.E. corner E. comtainment	Air Air	Indoor Indoor	Stationary Stationary	Field Sample Field Sample	Clear 1260 10	/12/2002 /12/2002					0.00474 0.00474			0.00474 0.00474		C	00474 00474		0 0	0 < 0.00474 0 < 0.00474
1R-15906 1R-15907		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Building Building	Center E. containment Center W. wall E. containment NE corner E. containment	Air Air	Indoor	Stationary Stationary	Field Sample Field Sample	Clear 1260 10	/12/2002 /12/2002					0.00474 0.00474			0.00474 0.00474		C	00474 00474		0 0	0 < 0.00474 0 < 0.00474
1R-15908 1R-14249 1R-14250		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Building Property Property	Ne corner E. containment  North end  North west end	Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample - Grace Field Sample - Grace	Pre 1249 10	/12/2002 /22/2002 < 0 /22/2002 < 0	i.002				0.00474 0.00478 0.00488			0.00474 0.00478 0.00488		C	00474 00478 00488		0 0	0 < 0.00474 0 < 0.00478 0 < 0.00488
1R-14251 1R-14252		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	South west end South end	Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample - Grace Field Sample - Grace Field Sample - Grace	Pre 1241 10	/22/2002 < 0 /22/2002 < 0 /22/2002 < 0	.002				0.00481 0.00471			0.00488 0.00481 0.00471		C	00488 00481 00471		0 0	0 < 0.00488 0 < 0.00481 0 < 0.00471
1R-14253 1R-14254		303 W. Thomas St 303 W. Thomas St	Property Property	South east end North east end	Air	Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1238 10	/22/2002 < 0					0.00471 0.00482 0.00482			0.00471 0.00482 0.00482		0	00471 00482 00482		0 0	0 < 0.00471
1R-16381 1R-16382		303 W. Thomas St 303 W. Thomas St	Property Property	North end N.W. end	Air	Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 931 10	/23/2002	.004				0.00458 0.00459			0.00458 0.00459		C	00458 00459		0 0	0 < 0.00458
1R-16383 1R-16384		303 W. Thomas St 303 W. Thomas St	Property Property	Southwest end South end	Air	Outdoor	Stationary	Field Sample - Grace Field Sample - Grace	N/A 924 10	/23/2002 < 0					0.00461 0.00465			0.00461 0.00465		C	00461 00465		0 0	0 < 0.00461
1R-16385 1R-16386		303 W. Thomas St 303 W. Thomas St	Property Property	Southeast end Northeast end	Air	Outdoor Outdoor	Stationary	Field Sample - Grace Field Sample - Grace	N/A 913 10 N/A 913 10	/23/2002	.003				0.00467 0.00467			0.00467 0.00467		C	00467 00467		0 0	0 < 0.00467
1R-16389 1R-16390		303 W. Thomas St 303 W. Thomas St	Property Property	North end North west end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1406 10 N/A 1411 10		.002 .002				0.00425 0.00423			0.00425 0.00423		C	00425 00423		0 0	0 < 0.00425
1R-16391 1R-16392		303 W. Thomas St 303 W. Thomas St	Property Property	South west end South end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1411 10	/24/2002 < 0					0.00423 0.00423			0.00423 0.00423		C	00423 00423		0 0	0 < 0.00423 0 < 0.00423
1R-16393 1R-16394		303 W. Thomas St 303 W. Thomas St	Property Property	South east end North east end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1406 10	/24/2002 < 0	.002 .002				0.00424 0.00425			0.00424 0.00425		C	00424 00425		0 0	0 < 0.00424 0 < 0.00425
1R-16397 1R-16398		303 W. Thomas St 303 W. Thomas St	Property Property	North end North west end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1233 10	/25/2002	.002				0.00483 0.00484			0.00483 0.00484		C	00483 00484		0 0	0 < 0.00483 0 < 0.00484
1R-16399 1R-16400		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	South west end South end	Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace Field Sample - Grace	N/A 1233 10		.004				0.00484 0.00484			0.00484 0.00484		C	00484 00484		0 0	0 < 0.00484
1R-16461 1R-16462 1R-16465		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	South east end Norht east end North end	Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace Field Sample - Grace	N/A 1259 10		.002				0.00474 0.00474			0.00474 0.00474		C	00474 00474		0 0	0 < 0.00474 0 < 0.00474 0 < 0.00469
1R-16466 1R-16467		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	North west end South west end	Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample - Grace Field Sample - Grace Field Sample - Grace	N/A 1277 10	/26/2002 < 0	1.002 1.002 1.002	0.0008	0.0143		0.00469 0.00467 0 1 0.00476			0.00469 0.00467 0.00476		C	00469 00467 00476		0 0	0 < 0.00469
1R-16468 1R-16469		303 W. Thomas St 303 W. Thomas St	Property Property	South west end South east end	Air	Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1275 10		.002	0.0008	0.0143		0.00476 0.00468 0.00468			0.00476 0.00468 0.00468		C	00478 00468 00468		0 0	0 < 0.00476
1R-16470 1R-16473		303 W. Thomas St 303 W. Thomas St	Property Property	North east end North end	Air	Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1272 10	/26/2002 < 0					0.00469 0.00447			0.00469 0.00447		0	00469 00447		0 0	0 < 0.00469 0 < 0.00447
1R-16474 1R-16475		303 W. Thomas St 303 W. Thomas St	Property Property	Northwest end Southwest end	Air	Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1334 10		.002				0.00447 0.00447			0.00447 0.00447		C	00447 00447		0 0	0 < 0.00447
1R-16476 1R-16477		303 W. Thomas St 303 W. Thomas St	Property Property	South end Southeast end	Air	Outdoor	Stationary	Field Sample - Grace Field Sample - Grace	N/A 1331 10	/28/2002 < 0 /28/2002 < 0	.002	0.0008	0.0134	C	0.00448			0.00448 0.00448		C	00448 00448		0 0	0 < 0.00448
1R-16478 1R-14257		303 W. Thomas St 303 W. Thomas St	Property Property	Northeast end North end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample	N/A 1303 10	/28/2002 < 0	.002 .002				0.00458 0.00434			0.00458 0.00434			00458 00434		0 0	0 < 0.00458
1R-14258 1R-14259		303 W. Thomas St 303 W. Thomas St	Property Property	Norhtwest end Southwest end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 1342 10		.002 .003	0.0008	0.0130	C	0.00445 0 1 0.00434			0.00445 0.00434			00445 00434		0 0	0.00445
1R-14260 1R-16407		303 W. Thomas St 303 W. Thomas St	Property Property	South end Southeast end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample	N/A 1344 10 N/A 1342 10		.002				0.00444 0.00445			0.00444 0.00445		C	00444 00445		0 0	0 < 0.00444
1R-16408 1R-16411		303 W. Thomas St 303 W. Thomas St	Property Property	Northeast end Noth End	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample - Grace	N/A 1260 10	/30/2002 < 0	.004 .002				0.00445 0.00474			0.00445 0.00474		C	00445 00474		0 0	0 < 0.00445 0 < 0.00474
1R-16412 1R-16413		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	North West End South West End South End	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1287 10	/30/2002 < 0	1.002 1.002				0.00465 0.00464			0.00465 0.00464		C	00465 00464		0 0	0 < 0.00465 0 < 0.00464
1R-16414 1R-16415 1R-16416		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	South End Southeast End Northeast End	Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample - Grace Field Sample - Grace Field Sample - Grace	N/A 1317 10	/30/2002 < 0 /30/2002 < 0 /30/2002 < 0	.002				0.00465 0.00453 0.00464			0.00465 0.00453 0.00464		C	00465 00453 00464		0 0	0 < 0.00465 0 < 0.00453 0 < 0.00464
1R-16420 1R-16581		303 W. Thomas St 303 W. Thomas St	Property Property	North west end Southwest end	Air	Outdoor	Stationary Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1287 10	/31/2002 < 0 /31/2002 < 0 /31/2002 < 0	.002				0.00464 0.00464 0.00464			0.00464 0.00464 0.00464		C	00464 00464 00464		0 0	0 < 0.00464 0 < 0.00464 0 < 0.00464
1R-16582 1R-16583		303 W. Thomas St 303 W. Thomas St	Property Property	South End South east end	Air	Outdoor	Stationary	Field Sample - Grace Field Sample - Grace	N/A 1317 10	/31/2002 < 0	.002 .002				0.00464 0.00453 0.00464			0.00464 0.00453 0.00464		C	00453 00464		0 0	0 < 0.00464
1R-16584 1R-16587		303 W. Thomas St 303 W. Thomas St	Property Property	North east end North end	Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1287 10	/31/2002 < 0 /1/2002 < 0	.002				0.00464 0.00457			0.00464 0.00457		C	00464 00457		0 0	0.00464
1R-16588 1R-16589		303 W. Thomas St 303 W. Thomas St	Property Property	Northwest end Southeast end	Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1289 11	1/1/2002 < 0 1/1/2002 < 0	.002				0.00463 0.00457			0.00463 0.00457		0	00463 00457		0 0	0 < 0.00463
1R-16590 1R-16591		303 W. Thomas St 303 W. Thomas St	Property Property	South end Southeast end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1305 11 N/A 1305 11	1/1/2002 < 0 1/1/2002 < 0	.002 .002				0.00457 0.00457			0.00457 0.00457			00457 00457		0 0	0 < 0.00457
1R-16592 1R-16595		303 W. Thomas St 303 W. Thomas St	Property Property	Northeast end North end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1197 11	1/1/2002 < 0 1/2/2002 < 0	.002				0.00458 0.00499			0.00458 0.00499		C	00458 00499		0 0	0 < 0.00458
1R-16596 1R-16597		303 W. Thomas St 303 W. Thomas St	Property Primary	Northwest end Southwest end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace	N/A 1195 11	1/2/2002 < 0	.002				0.00506 0.00499			0.00506 0.00499		C	00506 00499		0 0	0 < 0.00506
1R-16598 1R-16599		303 W. Thomas St 303 W. Thomas St	Property Property	South end Southeast end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1180 11	/2/2002	.002 .004				0.00499 0.00506			0.00499 0.00506		C	00499 00506		0 0	0 < 0.00499 0 < 0.00506
1R-16600 1R-16683		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Northeast end North end	Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1189 11	/4/2002 < 0	.002				0.00499 0.00502			0.00499 0.00502		C	00499 00502		0 0	0 < 0.00499 0 < 0.00502
1R-16684 1R-16685		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Northwest end Southwest end South end	Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample - Grace	N/A 1189 11	/4/2002 < 0	.002 .002				0.00502 0.00502			0.00502 0.00502		C	00502 00502		0 0	0 < 0.00502 0 < 0.00502 0 < 0.00502
1R-16686 1R-16687 1R-16688		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Southeast end Northeast end	Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample - Grace Field Sample - Grace Field Sample - Grace	N/A 1217 11	1/4/2002 < 0 1/4/2002 < 0 1/4/2002 < 0	.002				0.00502 0.00490 0.00501			0.00502 0.00490 0.00501		C	00502 00490 00501		0 0	0 < 0.00502 0 < 0.00490 0 < 0.00501
1R-16691 1R-16692		303 W. Thomas St 303 W. Thomas St	Property Property	North end North west end	Air	Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1284 11	/5/2002	.004				0.00465 0.00474			0.00465 0.00474		C	00465 00474		0 0	0 < 0.00465
1R-16693 1R-16694		303 W. Thomas St 303 W. Thomas St	Property Property	South west end South end	Air	Outdoor	Stationary	Field Sample - Grace Field Sample - Grace	N/A 1284 11	1/5/2002	.013				0.00465 0.00474			0.00465 0.00474		C	00474 00465 00474		0 0	0 < 0.00474
1R-16695 1R-16696		303 W. Thomas St 303 W. Thomas St	Property Property	South east end North east end	Air	Outdoor	Stationary	Field Sample - Grace Field Sample - Grace	N/A 1259 11	1/5/2002	.008				0.00474 0.00466			0.00474 0.00466		C	00474 00466		0 0	0 < 0.00474 0 < 0.00466
1R-16781 1R-16782		303 W. Thomas St 303 W. Thomas St	Property Property	North end North west end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1344 11	/6/2002 - 0	.002 .002	0.0008	0.0133	C	0 1 0.00444 0.00453			0.00444 0.00453			00444 00453		0 1	1 0.01494 0 < 0.00453
1R-16783 1R-16784		303 W. Thomas St 303 W. Thomas St	Property Property	South west end South end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1319 11	1/6/2002 < 0 1/6/2002 0	.002 .002				0.00453 0.00455			0.00453 0.00455			00453 00455		0 0	0 < 0.00453
1R-16785 1R-16786		303 W. Thomas St 303 W. Thomas St	Property Property	South east end North east end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1308 11 N/A 1308 11	1/6/2002 < 0 1/6/2002 < 0	.002				0.00456 0.00456			0.00456 0.00456		0	00456 00456		0 0	0 < 0.00456
1R-16787 1R-16788		303 W. Thomas St 303 W. Thomas St	Property Property	North end North west end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 888 11 N/A 1313 11	1/7/2002 0 1/7/2002 < 0	.004				0.00480 0.00455			0.00480 0.00455		C	00480 00455		0 0	0.00480
1R-16789 1R-16790		303 W. Thomas St 303 W. Thomas St	Property Property	South west end South end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1295 11	/7/2002 < 0	.003 .002	0.0008	0.0138	1	1 0 0.00461 0.00461			0.00461 0.00461		C	00461 00461		0 0	0.01549 0 < 0.00461
1R-16791 1R-16792		303 W. Thomas St 303 W. Thomas St	Property Property	South east end North east end	Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grace	N/A 1263 11	1/7/2002 < 0	1.002				0.00455 0.00473			0.00455 0.00473		C	00455 00473		0 0	0 < 0.00455
1R-16795 1R-16796 1R-16797		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	North end North west end South west end	Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample - Grace Field Sample - Grace	N/A 1347 11	1/8/2002 0	1.005 1.005				0.00442 0.00443 0.00444			0.00442 0.00443 0.00444		C	00442 00443 00444		0 0	0 < 0.00442 0 < 0.00443 0 < 0.00444
1R-16797 1R-16798 1R-16799		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	South west end South end South east end	Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample - Grace Field Sample - Grace Field Sample - Grace	N/A 1294 11	1/8/2002 0	1.003 1.005 1.006				0.00444 0.00461 0.00444			0.00444 0.00461 0.00444		C	00444 00461 00444		0 0	0 < 0.00444 0 < 0.00461 0 < 0.00444
1R-16800 1R-16961		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	North east end North end	Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample - Grace	N/A 1341 11		.004				0.00444 0.00445 0.00476			0.00444 0.00445 0.00476		C	00444 00445 00476		0 0	0.00445
1R-16962 1R-16963		303 W. Thomas St 303 W. Thomas St	Property Property	North west end South west end	Air	Outdoor	Stationary Stationary	Field Sample - Grace		1/9/2002 < 0	.002				0.00476 0.00478 0.00479			0.00478 0.00479		C	00478 00479		0 0	0 < 0.00476 0 < 0.00478 0 < 0.00479
10000								pic Crace							0.00473		1	0.00473						

												PCM (METHOE NIOSH 7400)							AUEDA / /	STM 5755			
												NIOSH 7400)	F	Poisson Concent	nfidence Interval	е			AREKA / A	S1W 5/55			
													Filter Status	on Conce	entration)		Libby Amphiboles (	Asb conc		otile ( C )	Other Amphiboles ( OA )	Total Asbestos	
		Property Group			Media				Pre Pos		L)/		Non Analyzed				Analytical Sensitivity (Air = S/cc) or	(Air = S/cc) or (Dust =	Ser	lytical (Air = S/cc) sitivity or S/cc) or (Dust =	Analytical Sensitivity (Air = S/cc) or S/cc) or		Asb conc (Air = S/cc) or
Sample ID 1R-16964	Task	(Location) 303 W. Thomas St	Sample Group Property	Location Description (Sub Location) South end	<b>Type</b> Air	Matrix Outdoor	Sample Type Stationary	Category Field Sample - Grad	Clea	ar (dust=cn	n²) Sample Date 11/9/2002	1 15010700		Lower Bound	Upper Bound	S<5u	S>5u (Dust = S/cm <sup>2</sup> ) 0.0048	S/cm <sup>2</sup> )	S<5u S>5u (Dust	= S/cm <sup>2</sup> ) S/cm <sup>2</sup> ) S<	Su S>5u (Dust = S/cm²) (Dust = S/c 0.00488		(Dust = S/cm <sup>2</sup> ) < 0.00488
1R-16965 1R-16966		303 W. Thomas St 303 W. Thomas St	Property Property	South east end North east end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1247 A 1247	11/9/2002	< 0.002 < 0.002					0.00479 0.00479	9		0.00479 0.00479	0.00479 0.00479	0 0	0 < 0.00479
1R-16967 1R-16968		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	North end North west end South west end	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad	e N/A	A 1275	11/11/2002	0.004 < 0.002					0.0048 0.0046	8		0.00480 0.00468	0.00480 0.00468	0 0	0.00480
1R-16969 1R-16970 1R-16971		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	South west end South end South east end	Air Air Air	Outdoor Outdoor Outdoor	Stationary Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1293	11/11/2002	0.003					0.0046 0.0046 0.0045	2		0.00466 0.00462 0.00453	0.00466 0.00462 0.00453	0 0	0 < 0.00466 0 < 0.00462 0 < 0.00453
1R-16972 1R-16926		303 W. Thomas St 303 W. Thomas St	Property Property	North east end South end of exclusion zone	Air	Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1280	11/11/2002	< 0.002					0.0046 0.0046	6		0.00466 0.00466	0.00453 0.00466 0.00466	0 0	0 < 0.00466
1R-16927 1R-16928		303 W. Thomas St 303 W. Thomas St	Property Property	Southwest end of exclusion zone  North east end of exclusion zone	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1280 A 1290	11/12/2002 11/12/2002	< 0.002		0.0008	0.0139	1	0.0046 0 0.0046			0.00466 0.00463	0.00466 0.00463	0 0	0 < 0.00466
1R-16929 1R-16930		303 W. Thomas St 303 W. Thomas St	Property Property	North end of exclusion zone  North west end of exclusion zone	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1246	11/12/2002	< 0.002					0.0046i 0.0047	9		0.00466 0.00479	0.00466 0.00479	0 0	0.00466
1R-16933 1R-16934 1R-16935		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	North end of exclusion zone  Northwest end of exclusion zone  South end of exclusion zone	Air Air Air	Outdoor Outdoor Outdoor	Stationary Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1255	11/13/2002			0.0051	0.0225	2	0.0047 0.00476 0 0.00478	6		0.00471 0.00476 0.00475	0.00471 0.00476 0.00475		0 < 0.00471 0 < 0.00476 0 0.04792
1R-16936 1R-16937		303 W. Thomas St 303 W. Thomas St	Property Property	Northwest end of exclusion zone Southeast end of exclusion zone	Air	Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1240	11/13/2002	0.003		0.0051	0.0223		0.0047	1		0.00473 0.00481 0.00479	0.00473 0.00481 0.00479		0.04792
1R-16938 1R-17103		303 W. Thomas St 303 W. Thomas St	Property Property	Southwest end of exclusion zone  North end of exclusion zone	Air	Outdoor	Stationary Stationary	Field Sample - Grad	e N/A	A 1223	11/13/2002	0.002 0.003					0.0048	8		0.00488 0.00486	0.00488 0.00486	0 0	0 < 0.00488
1R-17104 1R-17105		303 W. Thomas St 303 W. Thomas St	Property Property	Northwest end of exclusion zone South end of exclusion zone	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1229	11/14/2002	0.004 < 0.002					0.0048 0.0048	6		0.00481 0.00486	0.00481 0.00486	0 0	0 < 0.00481
1R-17106 1R-17107 1R-17108		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Northeast end of exclusion zone Southeast end of exclusion zone Southwest end of exclusion zone	Air Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1204	11/14/2002	< 0.002					0.00479 0.0049 0.0048	6		0.00479 0.00496 0.00483	0.00479 0.00496 0.00483	0 0	0 < 0.00479 0 < 0.00496
1R-17181 1R-17182		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Southwest end of exclusion zone Southeast End of Exclusion Zone South End of Exclusion Zone	Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1237	11/15/2002	0.005		0.0008	0.0145	1	0.0048 0.0048 0 0.0048	3		0.00483 0.00483 0.00483	0.00483 0.00483 0.00483	0 0	0 < 0.00483 0 < 0.00483 0 0.01623
1R-17183 1R-17184		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Northwest End of Exclusion Zone Southwest End of Exclusion Zone	Air Air	Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1252	11/15/2002	< 0.002 0.003		0.0008	0.0145	- '	0.0047	7		0.00477 0.00470	0.00463 0.00477 0.00470	0 0	0.01623
1R-17185 1R-17186		303 W. Thomas St 303 W. Thomas St	Property Property	North End of Exclusion Zone Northeast end of exclusion zone	Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad	e N/A	A 1273	11/15/2002	0.002					0.0046 0.0046	9		0.00469 0.00466	0.00469 0.00466	0 0	0 < 0.00469
1R-17189 1R-17190		303 W. Thomas St 303 W. Thomas St	Property Property	Southeast end of exclusion zone  Northeast end of exclusion zone	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1171 A 1168	11/16/2002	< 0.002 < 0.002					0.00429 0.00420	6		0.00425 0.00426	0.00425 0.00426	0 0	0 < 0.00425
1R-17191 1R-17192		303 W. Thomas St 303 W. Thomas St	Property Property	North end of exclusion zone  Northwest end of exclusion zone	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1171	11/16/2002	< 0.002 < 0.002					0.00420 0.00425	5		0.00426 0.00425	0.00426 0.00425	0 0	0 < 0.00426
1R-17193 1R-17194 1R-17281		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Southwest end of exclusion zone South end of exclusion zone North End of Exclusion Zone	Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample - Grad	e N/A	A 1166	11/16/2002	< 0.002					0.0042	7		0.00425 0.00427 0.00468	0.00425 0.00427	0 0	0.00425
1R-17282 1R-17283		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Northwest End of Exclusion Zone  Southwest End of Exclusion Zone	Air Air Air	Outdoor	Stationary Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1275	11/18/2002	< 0.002		0.0008	0.0140	1	0.0046i 0 0.0046i 0.0046i	8 0.01575		0.00468 0.00468	0.00468 0.00468 0.00468	1 0	0 < 0.00468 0 0.01575 0 < 0.00468
1R-17284 1R-17285		303 W. Thomas St 303 W. Thomas St	Property Property	South End of Exclusion Zone South East End of Exclusion Zone	Air	Outdoor	Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1275	11/18/2002	< 0.002 < 0.002 < 0.002					0.0046 0.0046	8		0.00468 0.00466	0.00468 0.00466	0 0	0 < 0.00468
1R-17286 1R-17301		303 W. Thomas St 303 W. Thomas St	Property Property	North East End of Exclusion Zone South east end of exclusion zone	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad	e N/A	A 1278 A 1245	11/18/2002 11/19/2002	< 0.002 < 0.002					0.0046 0.0047	7		0.00467 0.00479	0.00467 0.00479	0 0	0.00467
1R-17302 1R-17303		303 W. Thomas St 303 W. Thomas St	Property Property	Northeast end of exclusion zone North end of exclusion zone	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1250	11/19/2002	< 0.002 < 0.002					0.00479 0.00478	8		0.00479 0.00478	0.00479 0.00478	0 0	0.00479
1R-17304 1R-17305		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	Northwest end of exclusion zone Southwest end of exclusion zone South end of exclusion zone	Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad	e N/A	A 1247							0.00478 0.00479	9		0.00478 0.00479	0.00478 0.00479	0 0	0.00478
1R-17306 1R-17230 1R-17231		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	North end of exclusion zone  Northwest side of exclusion zone	Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1242	11/20/2002	0.008		0.0008	0.0144	1	0.0048 0 0.0048 0.0047	1 0.01617		0.00481 0.00481 0.00479	0.00481 0.00481 0.00479	1 0	0.00481 0.01617 0 < 0.00479
1R-17232 1R-17233		303 W. Thomas St 303 W. Thomas St	Property Property	South west side of exclusion zone South end of exclusion zone	Air	Outdoor	Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1247	11/20/2002	0.004					0.00479	9		0.00479 0.00479 0.00483	0.00479 0.00483	0 0	0 < 0.00479
1R-17234 1R-17235		303 W. Thomas St 303 W. Thomas St	Property Property	South east side of exclusion zone  Northeast side of exclusion zone	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1237 A 1240	11/20/2002	0.009					0.0048 0.0048	3		0.00483 0.00481	0.00483 0.00481	0 0	0 < 0.00483
1R-17240 1R-17311		303 W. Thomas St 303 W. Thomas St	Property Property	North Side of Exclusion Zone North West side of Exclusion Zone	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1242	11/21/2002	0.009 0.006					0.00479 0.0048	1		0.00479 0.00481	0.00479 0.00481	0 0	0 < 0.00479 < 0.00481
1R-17312 1R-17313		303 W. Thomas St 303 W. Thomas St	Property Property	South West side of Exclusion Zone South End of Exclusion Zone	Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad	e N/A	A 1242	11/21/2002	0.007 0.006					0.0048 <sup>-</sup> 0.0048	1		0.00481 0.00481	0.00481 0.00481	0 0	0.00481
1R-17314 1R-17315 1R-17273		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	South East side of Exclusion Zone  North East side of Exclusion Zone  N side F7	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1245	11/21/2002	0.007					0.0048 0.0047 0.0042	9		0.00481 0.00479 0.00420	0.00481 0.00479 0.00420	0 0	0 < 0.00481 0 < 0.00479 0 < 0.00420
1R-17274 1R-17275		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	N.E. side EZ SE. side EZ	Air	Outdoor	Stationary Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1420	11/22/2002						0.00420	0		0.00420 0.00420 0.00420	0.00420 0.00420 0.00420	0 0	0.00420
1R-17276 1R-17277		303 W. Thomas St 303 W. Thomas St	Property Property	S. side corrider N. Side corridor	Air	Outdoor Outdoor	Stationary	Field Sample - Grad	e N/A	A 1417	11/22/2002 11/22/2002	< 0.002 < 0.002					0.0042 0.0042	1		0.00421 0.00420	0.00421 0.00420	0 0	0 < 0.00421
1R-17278 1R-17321		303 W. Thomas St 303 W. Thomas St	Property Property	End of corridor North side Exclusion Zone	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1264	11/23/2002	< 0.002					0.00420 0.0047	2		0.00420 0.00472	0.00420 0.00472	0 0	0 < 0.00420 0 < 0.00420 0 < 0.00472
1R-17322 1R-17323		303 W. Thomas St 303 W. Thomas St	Property Property	North East side Exclusion Zone South East side of Exclusion Zone	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1267	11/23/2002	< 0.002					0.0047 0.0047	1		0.00472 0.00471	0.00472 0.00471	0 0	0.00472
1R-17325 1R-17326 1R-17329		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	E. end of corridor South Side of corridor North side Exclusion Zone	Air Air Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample - Grad	e N/A	A 1269	11/23/2002	< 0.002					0.00470 0.00470 0.0042	0		0.00470 0.00470 0.00421	0.00470 0.00470 0.00421	0 0	0 < 0.00470 0 < 0.00470 0 < 0.00421
1R-17330 1R-17331		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	North Side Exclusion Zone  North East side Exclusion Zone  South East side Exclusion Zone	Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1417	11/25/2002	< 0.002					0.0042 0.0042 0.0042	1		0.00421 0.00421 0.00422	0.00421 0.00421 0.00422	0 0	0.00421
1R-17332 1R-17333		303 W. Thomas St 303 W. Thomas St	Property Property	N. side of corridor E. end of corridor	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1409 A 1363	11/25/2002	< 0.002					0.00424 0.00438	8		0.00424 0.00438	0.00424 0.00438	0 0	0.00424
1R-17334 1R-17337		303 W. Thomas St 303 W. Thomas St	Property Property	South side of corridor  N. side of corridor	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1403 A 1573	11/26/2002	< 0.002		0.0008	0.0142	1	0.00429 0 0.00474	4 0.01595		0.00425 0.00474	0.00425 0.00474	0 0	0 < 0.00438 0 < 0.00425 0 0.01595 0 < 0.00476
1R-17338 1R-17339		303 W. Thomas St 303 W. Thomas St	Property Property	E. Side corridor S. Side corridor	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad	e N/A	A 1569	11/26/2002	< 0.002					0.00470 0.00470	6		0.00476 0.00476	0.00476 0.00476	0 0	0 < 0.00476 0 < 0.00476 0 < 0.00473
1R-17340 1R-17341 1R-17342		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	N. Side EZ N. E side EZ S.E. side EZ	Air Air Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample - Grad	e N/A	A 1576	11/26/2002	< 0.002					0.0047; 0.0047; 0.0047;	3		0.00473 0.00473 0.00473	0.00473 0.00473 0.00473	0 0	0 < 0.00473 0 < 0.00473 0 < 0.00473
1R-17324 1R-38162		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property	N. side corridor N. fence	Air Air	Outdoor	Stationary Stationary Stationary	Field Sample - Grad Field Sample - Grad Field Sample		A 1267	11/28/2002	< 0.002		0.0000	0.0086	0	0.0047		0 0	0.00473 0.00471 0.00448 < 0.00448	0.00473 0.00471 0 0 0.00448 < 0.00448	0 0	0 < 0.00473 0 < 0.00471 0 < 0.00448
1R-38163 1R-38164		303 W. Thomas St 303 W. Thomas St	Property Property	E. fence S. fence	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A		8/29/2006			0.0049	0.0213 0.0086	3	0 0.00449	9 0.01347	0 0	0.00449 < 0.00449 0.00447 < 0.00447	0 0 0.00449 < 0.00449 0 0 0.00447 < 0.00447	3 0	0.01347
1R-38165 1R-38166		303 W. Thomas St 303 W. Thomas St	Property Property	W. fence Clean room	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	A 1321 A 1410	8/29/2006 8/29/2006			0.0000 0.0000	0.0086 0.0081	0	0 0.00448 0 0.00420	8 < 0.00448 0 < 0.00420	0 0	0.00448 < 0.00448 0.00420 < 0.00420	0 0 0.00448 < 0.00448 0 0 0.00420 < 0.00420	0 0	0.00448
1R-38173 1R-38174		303 W. Thomas St 303 W. Thomas St	Property Property	NW NE	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A	A 1386 A 1386	8/30/2006 8/30/2006			0.0000 0.0000	0.0082 0.0082	0	0 0.0042 0 0.0042	7 < 0.00427 7 < 0.00427	0 0	0.00427 < 0.00427 0.00427 < 0.00427	0 0 0.00427 < 0.00427 0 0 0.00427 < 0.00427	0 0	0.00427
1R-38175 1R-38176 1R-38178		303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	SE SW Shoulder	Air Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	A 1383	8/30/2006	< 0.041		0.0000 0.0000	0.0082 0.0082	0		6 < 0.00426 8 < 0.00428	0 0	0.00426 < 0.00426 0.00428 < 0.00428	0 0 0.00426 < 0.00426 0 0 0.00428 < 0.00428	0 0	0.00426
1R-38179 1R-38180	Laborer	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Property Property	Shoulder Shoulder	Air Air Air	Outdoor Outdoor	Personal Personal Personal	Field Sample Field Sample Field Sample	N/A N/A	A 222	8/30/2006 8/30/2006 8/30/2006	< 0.041 < 0.012 < 0.016											
1R-38181 1R-38182	Operator Operator	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A N/A	A 63	8/30/2006	< 0.043 < 0.012											
1R-38183 1R-38184	Operator Laborer	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A N/A	A 163 A 63	8/30/2006 8/30/2006	< 0.017 < 0.043											
1R-38185 1R-38186	Laborer	303 W. Thomas St 303 W. Thomas St	Property Property	Shoulder Shoulder	Air Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A N/A	A 160		0.018											
1R-38302 1R-38187		303 W. Thomas St 303 W. Thomas St	Property Property	Passenger window NW	Air Air	Indoor Outdoor	Personal Stationary	Field Sample Field Sample	N/A	A 581 A 1327	8/30/2006 8/31/2006			0.0000	0.0086	0	0 0.00446	6 < 0.00446	0 0	0.00446 < 0.00446	0 0 0.00446 < 0.00446	0 0	0.00446

										PCM (METHOD																
										NIOSH 7400)	F	Poisson Concent Interval (90% Co	onfidence Interva	ce				AHE	ERA / ASTM 5755							
											Filter Status	on Conc	entration)		Libby Am	nphiboles ( L/	A ) Asb conc		Chrysotile (C)	Asb conc	Other	Amphiboles ( OA	<b>(</b> )		Total Asbestos	
	December Comm			Madia				Pre Vol (air			Non Analyzed				S	Analytical sensitivity r = S/cc) or	(Air = S/cc) or (Dust =		Analytical Sensitivity (Air = S/cc) or	(Air = S/cc) or (Dust =		Analytical Sensitivity (Air = S/cc) or	Asb conc (Air =			Asb conc (Air
Sample ID Task 1R-38188	Property Group (Location)	Sample Group Property NE	Location Description (Sub Location)	Type Air	Matrix Outdoor	Sample Type Stationary	Category Field Sample	Post Are Clear (dust=	cm²) Sample Date	Fibers/CC		Lower Bound	Upper Bound	S<5u		st = S/cm <sup>2</sup> )	S/cm <sup>2</sup> )	S<5u S>5u	(Dust = $S/cm^2$ )	S/cm <sup>2</sup> ) S.		Dust = S/cm <sup>2</sup> )	S/cc) or (Dust = S/cm <sup>2</sup> ) < 0.00456	Type Identified	S<5u S>5u	= S/cc) or (Dust = S/cm <sup>2</sup> ) < 0.00456
1R-38189 1R-38190	303 W. Thomas St 303 W. Thomas St	Property SE Property SW		Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 137 N/A 137	4 8/31/2006			0.0000	0.0083	0	0 0	0.00431	< 0.00430 < 0.00431 < 0.00430	0 0	0.00431	< 0.00430 < 0.00431 < 0.00430	0 0	0.00431	< 0.00430 < 0.00431 < 0.00430		0 0	< 0.00430 < 0.00431 < 0.00430
1R-38303 Laborer 1R-38304 Laborer	303 W. Thomas St 303 W. Thomas St	Property Should Property Should	der	Air Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A 289 N/A 63	8/31/2006	< 0.009 < 0.043																
1R-38305 Laborer 1R-38306 Operator 1R-38307 Operator	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Should Property Should Property Should	der	Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A 152 N/A 266	8/31/2006	0.019																
1R-38307 Operator 1R-38308 Operator 1R-38309 Laborer	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Should Property Should Property Should	der	Air Air Air	Outdoor Outdoor	Personal Personal Personal	Field Sample Field Sample Field Sample	N/A 63 N/A 152 N/A 262	8/31/2006	< 0.043 0.019 < 0.01																
1R-38310 Laborer 1R-38311 Laborer	303 W. Thomas St 303 W. Thomas St	Property Should Property Should	der	Air	Outdoor	Personal Personal	Field Sample Field Sample	N/A 65 N/A 149	8/31/2006	< 0.041																
1R-38194 1R-38195	303 W. Thomas St 303 W. Thomas St	Property NW Property NE		Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 141 N/A 136	4 9/5/2006 0 9/5/2006			0.0000	0.0080 0.0084	0	0 0	0.00436	< 0.00419 < 0.00436	0 0	0.00436	< 0.00419 < 0.00436	0 0	0.00436	< 0.00419 < 0.00436		0 0	< 0.00419 < 0.00436
1R-38196 1R-38197	303 W. Thomas St 303 W. Thomas St	Property SE Property SW		Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 136 N/A 136	0 9/5/2006			0.0000	0.0084 0.0084	0	0 0	0.00436	< 0.00435 < 0.00436	0 0	0.00436	< 0.00435 < 0.00436	0 0	0.00436	< 0.00435 < 0.00436		0 0	< 0.00435 < 0.00436
1R-38199 1R-38316 1R-38317	303 W. Thomas St 303 W. Thomas St 303 W. Thomas St	Property Clean   Property NW Property NE	TOOTI	Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 127 N/A 141 N/A 141	3 9/6/2006			0.0000 0.0000 0.0000	0.0089 0.0080 0.0080	0	0 0	0.00419	< 0.00465 < 0.00419 < 0.00418	0 0		< 0.00465 < 0.00419 < 0.00418	0 0	0.00419	< 0.00465 < 0.00419 < 0.00418		0 0	< 0.00465 < 0.00419 < 0.00418
1R-38318 1R-38319	303 W. Thomas St 303 W. Thomas St	Property SE Property SW		Air	Outdoor	Stationary	Field Sample Field Sample	N/A 145 N/A 139	6 9/6/2006			0.0000	0.0078 0.0081	0	0 0	0.00407	< 0.00410 < 0.00407 < 0.00424	0 0	0.00407	< 0.00410 < 0.00407 < 0.00424	0 0	0.00407	< 0.00410 < 0.00407 < 0.00424		0 0	< 0.00410 < 0.00407 < 0.00424
1R-23101 1R-23103	Riverside Park Riverside Park	Property SW of Building Clearn	nroom	Air Air	Outdoor Indoor	Stationary Stationary	Field Sample Field Sample	N/A 121 N/A 136	5 10/1/2003			0.0000 0.0000	0.0093 0.0083	0	0 0	0.00434	< 0.0049 < 0.0043	0 0 0	0.00	< 0.0049 < 0.0043	0 0 0. 0 0 0.	00	< 0.0049 < 0.0043		0 0	< 0.0049 < 0.0043
1R-23319 1R-23320 1R-23105	Riverside Park Riverside Park Riverside Park	Property E of E2 Property SE of E2 Property E of E2	EZ	Air Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 125 N/A 124 N/A 164	8 10/1/2003			0.0000	0.0091 0.0091 0.0087	0	0 0	0.00475	< 0.0047 < 0.0048 < 0.0045	0 00	0.00	< 0.0047 < 0.0048 < 0.0045	0 0 0. 0 0 0. 0 0 0.	00	< 0.0047 < 0.0048 < 0.0045		0 0	< 0.0047 < 0.0048 < 0.0045
1R-23105 1R-23106 1R-23107	Riverside Park Riverside Park Riverside Park	Property SE of E	EZ	Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 164 N/A 171 N/A 160	1 10/2/2003			0.0000	0.0083	0	0	0.00433	< 0.0045 < 0.0043 < 0.0046	0 00		< 0.0043 < 0.0046	0 00.	00	< 0.0043 < 0.0046		0 0	< 0.0043 < 0.0043 < 0.0046
1R-23108 1R-23118	Riverside Park Riverside Park	Property W of E	Z	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 161 N/A 142	6 10/2/2003			0.0000	0.0088	0	0 0	0.00458	< 0.0046 < 0.0042	0 00	0.00	< 0.0046 < 0.0042	0 0 0.	00	< 0.0046 < 0.0042		0 0	< 0.0046 < 0.0042
1R-23119 1R-23120	Riverside Park Riverside Park	Yard SE of B Yard SW of	EZ	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 139 N/A 132	8 10/3/2003			0.0000 0.0000	0.0082 0.0086	0	0 0	0.00446	< 0.0043 < 0.0045	0 0 0	0.00	< 0.0043 < 0.0045	0 0 0. 0 0 0.	00	< 0.0043 < 0.0045		0 0	< 0.0043 < 0.0045
1R-23121 1R-23135 1R-23136	Riverside Park Riverside Park Riverside Park	Yard         W of E           Property         E of E2           Property         SE of E3	Z	Air Air Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 133 N/A 157 N/A 153	7 10/6/2003			0.0000 0.0000 0.0000	0.0085 0.0090 0.0093	0	0 0	0.00469	< 0.0044 < 0.0047 < 0.0048	0 00		< 0.0044 < 0.0047	0 0 0. 0 0 0. 0 0 0.	00	< 0.0044 < 0.0047 < 0.0048		0 0	< 0.0044 < 0.0047 < 0.0048
1R-23136 1R-23137 1R-23138	Riverside Park Riverside Park Riverside Park	Property SW of Property W of E	EZ	Air Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 153 N/A 125 N/A 119	8 10/6/2003			0.0000	0.0093 0.0090 0.0080	0	0 0	0.00471		0 00		< 0.0048 < 0.0047 < 0.0041	0 00.	00	< 0.0048 < 0.0047 < 0.0041		0 0	< 0.0048 < 0.0047 < 0.0041
1R-23428 1R-23429	Riverside Park Riverside Park	Property E of E2 Property SE of E	Z	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 145 N/A 149	5 10/7/2003			0.0000	0.0078 0.0076	0	0 0	0.00407	< 0.0041 < 0.0041 < 0.0040	0 00		< 0.0041 < 0.0040	0 0.0	00 00	< 0.0041 < 0.0040		0 0	< 0.0041 < 0.0041 < 0.0040
1R-23430 1R-23431	Riverside Park Riverside Park	Property SW of Property W of E	EZ .	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 149 N/A 149	3 10/7/2003			0.0000 0.0000	0.0076 0.0076	0	0 0	0.00397	< 0.0040 < 0.0040	0 00	0.00	< 0.0040 < 0.0040	0 0 0. 0 0 0.	00	< 0.0040 < 0.0040		0 0	< 0.0040 < 0.0040
1R-23443 1R-23444	Riverside Park Riverside Park	Property W of E Property SW of	EZ	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 140 N/A 129	1 10/8/2003			0.0000	0.0081 0.0088	0	0 0	0.00459	< 0.0042 < 0.0046	0 00	0.00	< 0.0042 < 0.0046	0 0.0.		< 0.0042 < 0.0046		0 0	< 0.0042 < 0.0046
1R-23445 1R-23446 1R-23459	Riverside Park Riverside Park Riverside Park	Property SE of E Property E of E2 Property W of E	Z	Air Air Air	Outdoor Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 120 N/A 141 N/A 126	6 10/8/2003			0.0000 0.0000 0.0000	0.0095 0.0080 0.0089	0	0 0	0.00418	< 0.0049 < 0.0042 < 0.0047	0 00	0.00	< 0.0049 < 0.0042 < 0.0047	0 00.		< 0.0049 < 0.0042 < 0.0047		0 0	< 0.0049 < 0.0042 < 0.0047
1R-23460 1R-23461	Riverside Park Riverside Park	Property SW of Property SE of B	EZ	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 146 N/A 102	3 10/9/2003			0.0000	0.0077 0.0092	0	0 0	0.00402	< 0.0047 < 0.0040 < 0.0048	0 00	0.00	< 0.0047 < 0.0040 < 0.0048	0 00.	00	< 0.0040 < 0.0048		0 0	< 0.0040 < 0.0048
1R-23462 1R-23468 Truck driver-level D	Riverside Park Riverside Park	Property E of E2  Vehicle Should	der	Air Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A 143 N/A 484		0.04		0.0000	0.0065	0	0	0.00341		0 00	0.00	< 0.0034	0 00.		< 0.0034		0 0	< 0.0034
1R-23469 Truck driver-level D 1R-23473	Riverside Park Riverside Park Riverside Park	Vehicle Should Property W of E	Z	Air	Outdoor Outdoor	Personal Stationary	Field Sample Field Sample	N/A 64 N/A 138	7 10/10/2003	< 0.042		0.0000	0.0081	0	0		< 0.0042	0 00	0.00	< 0.0042	0 0 0.	00	< 0.0042		0 0	< 0.0042
1R-23474 1R-23475 1R-23476	Riverside Park Riverside Park Riverside Park	Property SW of Property SE of E	EZ	Air Air Air	Outdoor Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 138 N/A 717 N/A 138	10/10/2003			0.0000 0.0000 0.0000	0.0081 0.0087 0.0081	0	0 0	0.00455	< 0.0042 < 0.0046 < 0.0042	0 00	0.00	< 0.0042 < 0.0046 < 0.0042	0 0 0.	00	< 0.0042 < 0.0046 < 0.0042		0 0	< 0.0042 < 0.0046
1R-23478 1R-23480	Riverside Park Riverside Park	Property W of E	Z	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 146 N/A 146	0 10/13/2003			0.0000	0.0077	0	0 0	0.00403	< 0.0042 < 0.0040 < 0.0040	0 00	0.00	< 0.0042 < 0.0040 < 0.0040	0 00.	00	< 0.0042 < 0.0040 < 0.0040		0 0	< 0.0042 < 0.0040 < 0.0040
1R-23481 1R-23486	Riverside Park Riverside Park	Property E of E2 Property W of E	ΞZ	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 107 N/A 156	1 10/14/2003			0.0000 0.0000	0.0088 0.0090	0	0 0	0.00471	< 0.0046 < 0.0047	0 00	0.00	< 0.0046 < 0.0047	0 0 0. 0 0 0.	00	< 0.0046 < 0.0047		0 0	< 0.0046 < 0.0047
1R-23487 1R-23488	Riverside Park Riverside Park Riverside Park	Property SW of Property SE of E	EZ	Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 141 N/A 126	6 10/14/2003			0.0000	0.0080 0.0089	0	0 0	0.00464	< 0.0042 < 0.0046	0 00		< 0.0042 < 0.0046	0 0 0. 0 0 0.	00	< 0.0042 < 0.0046		0 0	< 0.0042 < 0.0046
1R-23489 1R-23494 1R-23495	Riverside Park Riverside Park Riverside Park	Property W of E Property SW of	EZ .	Air Air Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 130 N/A 113 N/A 132	9 10/15/2003			0.0000 0.0000 0.0000	0.0086 0.0083 0.0085	0	0	0.00430	< 0.0045 < 0.0043 < 0.0044		0.00	< 0.0045 < 0.0043 < 0.0044	0 0 0. 0 0 0. 0 0 0.		< 0.0045 < 0.0043 < 0.0044		0 0	< 0.0045 < 0.0043 < 0.0044
1R-23496 1R-23497	Riverside Park Riverside Park	Property WSW Property SE of B		Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 132 N/A 131	5 10/15/2003			0.0000	0.0085 0.0086	0	0 0	0.00444	< 0.0044 < 0.0045	0 0 0	0.00	< 0.0044 < 0.0045 < 0.0044	0 00.	00	< 0.0044 < 0.0045		0 0	< 0.0044
1R-23666 1R-23667	Riverside Park Riverside Park	Property W of E Property SW of	EZ	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 135 N/A 123	2 10/16/2003 5 10/16/2003			0.0000 0.0000	0.0084 0.0091	0	0 0	0.00435 0.00476	< 0.0044 < 0.0048	0 00	0.00	< 0.0048	0 0 0. 0 0 0.		< 0.0044 < 0.0048		0 0	< 0.0044 < 0.0048 < 0.0046
1R-23668 1R-23669 1R-23589	Riverside Park Riverside Park Riverside Park	Property W SW Property SE of B Property SW of	EZ	Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 127 N/A 988	10/16/2003			0.0000 0.0000 0.0000	0.0088 0.0082 0.0079	0	0 0	0.00425	< 0.0046 < 0.0043 < 0.0041	0 00	0.00	< 0.0046 < 0.0043 < 0.0041	0 0 0. 0 0 0. 0 0 0.	00	< 0.0046 < 0.0043 < 0.0041		0 0	< 0.0046 < 0.0043 < 0.0041
1R-23589 1R-23590 1R-23591	Riverside Park Riverside Park Riverside Park	Property W of E	EZ .	Air Air Air	Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 142 N/A 108 N/A 142	4 10/17/2003			0.0000	0.0079 0.0087 0.0079	0	0 0	0.00452	< 0.0041 < 0.0045 < 0.0041		0.00	< 0.0045 < 0.0041	0 00.	00	< 0.0041 < 0.0045 < 0.0041		0 0	< 0.0041 < 0.0045 < 0.0041
1R-23592 1R-23679	Riverside Park Riverside Park	Property E of E2 Property W of E	Z EZ	Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 142 N/A 134	2 10/17/2003			0.0000	0.0079	0	0 0	0.00413 0.00436	< 0.0041 < 0.0044		0.00	< 0.0041 < 0.0044	0 0 0.	00	< 0.0041 < 0.0044		0 0	< 0.0041 < 0.0044
1R-23680 1R-23681	Riverside Park Riverside Park	Property SW of Property WSW	of EZ	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 133 N/A 133	6 10/20/2003			0.0000 0.0000	0.0085 0.0085	0	0 0	0.00440	< 0.0044 < 0.0044		0.00	< 0.0044 < 0.0044	0 0 0. 0 0 0. 0 0 0.		< 0.0044 < 0.0044		0 0	< 0.0044 < 0.0044
1R-23682 1R-23685 Laborer 1R-23686 Level D Truck Driver	Riverside Park Riverside Park	Property SE of B	der	Air	Outdoor Outdoor	Stationary Personal	Field Sample Field Sample	N/A 130 N/A 218	10/20/2003	0.015		0.0000	0.0087	0	0	0.00451	< 0.0045	0 00	0.00	< 0.0045	0 00.	00	< 0.0045		0 0	< 0.0045
1R-23686 Level D Truck Driver 1R-23688 Level D Truck Driver 1R-23689 Level D Truck Driver	Riverside Park Riverside Park Riverside Park	Property Should Property Should Property Should	der	Air Air Air	Outdoor Outdoor Outdoor	Personal Personal Personal	Field Sample Field Sample Field Sample	N/A 204 N/A 62 N/A 171	10/20/2003	0.041 0.12 0.067																
1R-23690 Laborer 1R-23691 Level D Truck Driver	Riverside Park Riverside Park	Property Should Property Should	der der	Air	Outdoor Outdoor	Personal Personal	Field Sample Field Sample	N/A 202 N/A 66	10/20/2003	< 0.013																
1R-23692 1R-23693	Riverside Park Riverside Park	Property W of E Property SW of	EZ	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 126 N/A 125	0 10/21/2003			0.0000	0.0089 0.0090	0	0 0	0.00470	< 0.0046 < 0.0047		0.00	< 0.0046 < 0.0047	0 0 0. 0 0 0.	00	< 0.0046 < 0.0047		0 0	< 0.0046 < 0.0047
1R-23694 1R-23695	Riverside Park Riverside Park Riverside Park	Property WSW Property SE of B Property W. of B	EZ	Air	Outdoor Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 124 N/A 127	5 10/21/2003			0.0000	0.0091 0.0089	0	0 0	0.00461	< 0.0047 < 0.0046		0.00 0.00 0.00	< 0.0047 < 0.0046	0 0 0. 0 0 0. 0 0 0.		< 0.0047		0 0	< 0.0047 < 0.0046
1R-23801 1R-23802 1R-23803	Riverside Park Riverside Park Riverside Park	Property S.W. o		Air Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 135 N/A 132 N/A 133	5 10/22/2003			0.0000 0.0000 0.0000	0.0084 0.0085 0.0085	0	0	0.00444	< 0.0044 < 0.0044 < 0.0044	0 00	0.00	< 0.0044 < 0.0044 < 0.0044	0 0.	00	< 0.0044 < 0.0044 < 0.0044		0 0	< 0.0044 < 0.0044 < 0.0044
1R-23804 1R-23805	Riverside Park Riverside Park	Property S.E. of Property S.E. of	f EZ f EZ	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 129 N/A 126	7 10/22/2003			0.0000 0.0000 0.0000	0.0085 0.0087 0.0089	0	0 0	0.00453	< 0.0044 < 0.0045 < 0.0046	0 00	0.00	< 0.0045 < 0.0046	0 0 0. 0 0 0. 0 0 0.	00	< 0.0044 < 0.0045 < 0.0046		0 0	< 0.0045
1R-23812 1R-23813	Riverside Park Riverside Park	Property W. of E Property S.W. o	EZ of EZ	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 128 N/A 125	3 10/23/2003 0 10/23/2003			0.0000 0.0000	0.0088 0.0090	0	0 0	0.00458 0.00470	< 0.0046 < 0.0047	0 0 0	0.00	< 0.0046 < 0.0047	0 0 0. 0 0 0.	00 00	< 0.0046 < 0.0047		0 0	< 0.0046 < 0.0046 < 0.0047
1R-23814 1R-23815	Riverside Park Riverside Park	Property S.E. of		Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 125 N/A 127	5 10/23/2003			0.0000 0.0008	0.0090 0.0138	0	0 1	0.00461	< 0.0047 0.0046	0 00		< 0.0047 < 0.0046	0 0 0. 0 0 0.	00	< 0.0047 < 0.0046		0 1	< 0.0047 0.0046
1R-23826 1R-23827 1R-23829	Riverside Park Riverside Park Riverside Park	Property W. of E Property S.W. o Property S.E. of	of EZ	Air Air Air	Outdoor Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample Field Sample	N/A 120 N/A 126 N/A 122	1 10/24/2003			0.0000 0.0000 0.0000	0.0094 0.0090 0.0093	0	0 0	0.00466	< 0.0049 < 0.0047 < 0.0048		0.00	< 0.0049 < 0.0047 < 0.0048	0 0 0. 0 0 0. 0 0 0.	00	< 0.0049 < 0.0047 < 0.0048		0 0	< 0.0049 < 0.0047 < 0.0048
1R-23829 1R-23835 1R-23836	Riverside Park Riverside Park Riverside Park	Property W. of E Property S.W. o	EZ	Air Air	Outdoor Outdoor	Stationary Stationary Stationary	Field Sample Field Sample	N/A 122 N/A 920 N/A 131	10/27/2003			0.0000	0.0093 0.0088 0.0086	0	0 0	0.00460	< 0.0048 < 0.0046 < 0.0045	0 0 0	0.00	< 0.0048 < 0.0046 < 0.0045	0 00.	00	< 0.0048 < 0.0046 < 0.0045		0 0	< 0.0046 < 0.0045
1R-23837 1R-23838	Riverside Park Riverside Park	Property W.S.W Property S.E. of	V. of EZ f EZ	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 136 N/A 926	1 10/27/2003 5 10/27/2003			0.0000 0.0008	0.0084 0.0137	0	0 1	0.00435 0.00457	< 0.0044 0.0046		0.00	< 0.0044 < 0.0046	0 0 0.	00	< 0.0044 < 0.0046		0 0	< 0.0044 0.0046
1R-23849 1R-23850	Riverside Park Riverside Park	Property S.W. o Property W.S.W	of EZ V. of EZ	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A 115 N/A 120				0.0000 0.0000	0.0082 0.0094	0	0	0.00429 0.00492	< 0.0043 < 0.0049	0 00	0.00	< 0.0043 < 0.0049	0 0 0. 0 0 0.	00	< 0.0043 < 0.0049		0 0	< 0.0043 < 0.0049

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												PCM (METHOD -															
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														Interval (90% Cor		ı											
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													Non				Analytical	(Air = S/cc)		Analytical	(Air = S/cc)		Analytical				4
									Pre	Vol (air=L)/			Analyzed				Sensitivity	or		Sensitivity	or		Sensitivity	Asb conc (Air =	Asbestos		Asb conc (Air
		perty Group			Media		1		Post	Area					l		(Air = S/cc) or	(Dust =		(Air = S/cc) or	(Dust =		(Air = S/cc) o		Туре		= S/cc) or
Sample ID		cation)	Sample Group	Location Description (Sub Location)	Type	Matrix	Sample Type	Category	Clear	(dust=cm <sup>2</sup> )	Sample Date	Fibers/CC		Lower Bound	Upper Bound	S<5u	S>5u (Dust = S/cm²)	S/cm <sup>2</sup> )	S<5u S>5	- ,	S/cm <sup>2</sup> )	S<5u S	>5u (Dust = S/cm	, (,	Identified	S<5u S>5u	(Dust = S/cm <sup>2</sup> )
1R-23851		erside Park erside Park	Property	S.E. of EZ W. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1317	10/28/2003		0 - 1 - 1 - 1	0.0000	0.0086	0	0 0.00450	< 0.0045	0	0 0.00	< 0.0045	0	0 0.00	< 0.0045		0 0	0 < 0.0045
1R-24101 1R-24102		erside Park erside Park	Property Property	S.W. of EZ	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1283 1046	10/29/2003		Overloaded	0.0000	0.0091	0	0 0.00472	< 0.0047	0	0 0.00	< 0.0047	0	0 0.00	< 0.0047		0 (	0 < 0.0047
1R-24103		erside Park	Property	W.S.W. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1345	10/29/2003			0.0000	0.0085	0	0 0.00440	< 0.0044	0	0 0.00	< 0.0044	0	0 0.00	< 0.0044		0 0	0 < 0.0044
1R-24104		erside Park	Property	SE. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1380	10/29/2003			0.0000	0.0082	0	0 0.00429	< 0.0043	0	0 0.00	< 0.0043	0	0 0.00	< 0.0043		0 0	0 < 0.0043
1R-24113		erside Park	Property	W of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1222	10/30/2003			0.0000	0.0093	0	0 0.00485	< 0.0049	0	0 0.00	< 0.0049	0	0 0.00	< 0.0049		0 0	0 < 0.0049
1R-24114 1R-24115		erside Park erside Park	Property Property	SW of EZ WSW of EZ	Air	Outdoor	Stationary	Field Sample	N/A N/A	1069	10/30/2003			0.0000	0.0089	0	0 0.00462	< 0.0046	0	0 0.00	< 0.0046 < 0.0047	0	0 0.00	< 0.0046		0 0	0 < 0.0046
1R-24115 1R-24116		erside Park	Property	SE of EZ	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1249 1083	10/30/2003			0.0000	0.0091	0	0 0.00474	< 0.0047	0	0 0.00	< 0.0047	0	0 0.00	< 0.0047		0 0	0 < 0.0047
1R-24142		erside Park	Property	E of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1110	10/31/2003			0.0000	0.0085	0	0 0.00445	< 0.0045	0	0 0.00	< 0.0045	0	0 0.00	< 0.0045		0 0	0 < 0.0045
1R-24143		erside Park	Property	SE of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1440	10/31/2003			0.0000	0.0079	0	0 0.00411	< 0.0041	0	0 0.00	< 0.0041	0	0 0.00	< 0.0041		0 0	0 < 0.0041
1R-24144		erside Park	Property	SSE of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1239	10/31/2003			0.0000	0.0092	0	0 0.00478	< 0.0048	0	0 0.00	< 0.0048	0	0 0.00	< 0.0048		0 0	0 < 0.0048
1R-24145		erside Park erside Park	Property Property	SW of EZ W. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1085	10/31/2003			0.0000	0.0087	0	0 0.00455	< 0.0046	0	0 0.00	< 0.0046	0	0 0.00	< 0.0046		0 0	0 < 0.0046
1R-24156 1R-24157		erside Park	Property	S.W. of EZ	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1170 1252	11/3/2003			0.0000	0.0081	0	0 0.00422 0 0.00473	< 0.0042 < 0.0047	0	0 0.00	< 0.0042 < 0.0047	0	0 0.00	< 0.0042		0 0	0 < 0.0042
1R-24158		erside Park	Property	S.E. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	793	11/3/2003			0.0000	0.0090	0	0 0.00467	< 0.0047	0	0 0.00	< 0.0047	0	0 0.00	< 0.0047		0 0	0 < 0.0047
1R-24159		erside Park	Property	E. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	906	11/3/2003			0.0000	0.0090	0	0 0.00467	< 0.0047	0	0 0.00	< 0.0047	0	0 0.00	< 0.0047		0 0	0 < 0.0047
1R-24126		erside Park	Property	E of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1204	11/4/2003			0.0000	0.0094	0	0 0.00492	< 0.0049	0	0 0.00	< 0.0049	0	0 0.00	< 0.0049		0 0	0 < 0.0049
1R-24127 1R-24128		erside Park erside Park	Property Property	SE of EZ SW of EZ	Air	Outdoor	Stationary	Field Sample	N/A N/A	1214	11/4/2003			0.0000	0.0094	0	0 0.00488	< 0.0049	0	0 0.00	< 0.0049 < 0.0046	0	0 0.00	< 0.0049		0 0	0 < 0.0049
1R-24128 1R-24129		erside Park	Property	W of EZ	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1085	11/4/2003			0.0000	0.0087	0	0 0.00455	< 0.0046	0	0 0.00	< 0.0046	0	0 0.00	< 0.0046			0 < 0.0046
1R-24135		erside Park	Property	W. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1172	11/5/2003			0.0000	0.0081	0	0 0.00421	< 0.0043	0	0 0.00	< 0.0043	0	0 0.00	< 0.0043		0 0	0 < 0.0043
1R-24136	Rive	erside Park	Property	S.W. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	919	11/5/2003			0.0000	0.0088	0	0 0.00460	< 0.0046	0	0 0.00	< 0.0046	0	0 0.00	< 0.0046		0 0	0 < 0.0046
1R-24137		erside Park	Property	S.E. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1166	11/5/2003			0.0007	0.0127	1	0 0.00423	0.0042	0	0 0.00	< 0.0042	0	0 0.00	< 0.0042		1 0	0 0.0042
1R-24138 1R-21106		erside Park erside Park	Property Property	E. of EZ W. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1092	11/5/2003			0.0000	0.0087	0	0 0.00452	< 0.0045	0	0 0.00	< 0.0045	0	0 0.00	< 0.0045			0 < 0.0045
1R-21106 1R-21107		erside Park erside Park	Property	S.W. of EZ	Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	694 807	11/6/2003 11/6/2003			0.0000	0.0091	0	0 0.00474	< 0.0047	0	0 0.00	< 0.0047	0	0 0.00	< 0.0047			0 < 0.0047
1R-21107		erside Park	Property	S.E. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1158	11/6/2003			0.0000	0.0088	0	0 0.00459	< 0.0037	0	0 0.00	< 0.0046	0	0 0.00	< 0.0037			0 < 0.0040
1R-21109	Rive	erside Park	Property	E. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1230	11/6/2003			0.0000	0.0093	0	0 0.00482	< 0.0048	0	0 0.00	< 0.0048	0	0 0.00	< 0.0048		0 0	0 < 0.0048
1R-21116		erside Park	Property	W. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	836	11/7/2003			0.0000	0.0085	0	0 0.00443	< 0.0044	0	0 0.00	< 0.0044	0	0 0.00	< 0.0044		0 0	0 < 0.0044
1R-21117		erside Park erside Park	Property	S.W. of EZ S.E. of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1131	11/7/2003			0.0008	0.0131	1	0 0.00436	0.0044	0	0 0.00	< 0.0044	0	0 0.00	< 0.0044 < 0.0043		1 0	0 0.0044
1R-21118 1R-21119		erside Park erside Park	Property Property	E. of EZ	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1137 929	11/7/2003			0.0000	0.0083	0	0 0.00434 0 0.00455	< 0.0043 < 0.0046	0	0 0.00	< 0.0043	0	0 0.00	< 0.0043			0 < 0.0043
1R-24230		erside Park	Property	SW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1361	11/10/2003			0.0000	0.0087	0	0 0.00435	< 0.0040	0	0 0.00	< 0.0046	0	0 0.00	< 0.0044			0 < 0.0040
1R-24231	Rive	erside Park	Property	SE of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1339	11/10/2003			0.0000	0.0085	0	0 0.00442	< 0.0044	0	0 0.00	< 0.0044	0	0 0.00	< 0.0044		0 0	0 < 0.0044
1R-24232		erside Park	Property	E of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1409	11/10/2003			0.0000	0.0081	0	0 0.00420	< 0.0042	0	0 0.00	< 0.0042	0	0 0.00	< 0.0042			0 < 0.0042
1R-24233		erside Park	Property	N of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1278	11/10/2003			0.0000	0.0089	0	0 0.00463	< 0.0046	0	0 0.00	< 0.0046	0	0 0.00	< 0.0046			0 < 0.0046
1R-24245 1R-24246		erside Park erside Park	Property Property	E of EZ  N of EZ	Air Air	Outdoor Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1327 970	11/11/2003			0.0000	0.0086	0	0 0.00446 0 0.00436	< 0.0045 < 0.0044	0	0 0.00	< 0.0045 < 0.0044	0	0 0.00	< 0.0045			0 < 0.0045 0 < 0.0044
1R-24246 1R-24247		erside Park	Property	SW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1549	11/11/2003			0.0000	0.0084	0	0 0.00436	< 0.0044	0	0 0.00	< 0.0044	0	0 0.00	< 0.0044	<u> </u>		0 < 0.0044
1R-24248		erside Park	Property	SE of EZ	Air	Outdoor	Stationary	Field Sample	N/A		11/11/2003			0.0000	0.0092	0	0 0.00478	< 0.0048	0	0 0.00	< 0.0048	0	0 0.00	< 0.0048			0 < 0.0048
1R-24269		erside Park	Property	SW of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1037	11/13/2003			0.0000	0.0091	0	0 0.00476		0	0 0.00	< 0.0048	0	0 0.00	< 0.0048			0 < 0.0048
1R-24270		erside Park	Property	SE of EZ	Air	Outdoor	Stationary	Field Sample	N/A	1467	11/13/2003			0.0000	0.0078	0	0 0.00404	< 0.0040	0	0 0.00	< 0.0040	0	0 0.00	< 0.0040			0 < 0.0040
1R-24271 1R-24272		erside Park erside Park	Property Property	N of EZ E of EZ	Air Air	Outdoor	Stationary Stationary	Field Sample Field Sample	N/A N/A	1467 1467	11/13/2003			0.0000	0.0078	0	0 0.00404 0 0.00404	< 0.0040 < 0.0040	0	0 0.00	< 0.0040 < 0.0040	0	0 0.00	< 0.0040 < 0.0040			0 < 0.0040
IR-24212	River	DISNO FAIR	riopeity	L 01 LL	All	Outuooi	Stationary	rieiu Sampië	IN/A	1407	11/13/2003			0.0000	0.0076	- 0	U U.UU4U4	< v.0040	U	0 0.00	< 0.0040	U	0 0.00	< 0.0040		U 0	J < 0.0040

## Appendix C Libby Superfund Site Lot Blank Data as of February 24, 2008

Page 1 of 9 Air, Dust (ISO) 7/29/2009, 4:18 PM

Appendix C - Libby Suberfund Site Lot Blank Data as of February 24, 2008

Note: The report excludes all Lab OC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

	report excludes all La						- F		,			,			,		ISO Concentra	ration	s (Air = structu	res/cc)(Du	st = struc	tures/cm²)	(METHOD	- ISO 1031	12)							
														ı	Libby Amphibo	les (LA)					Chry	sotile (C)						Othr	er Amphib	oles ( OA )		
												Exclude	d Structure		Structures				Excluded Str	uctures	Str	uctures De	tected			Exclu	ided Structur	es	Structur	res Detected		
Sample ID	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Vol Post (air=L)/ Clear Area (dust= cm²)	Sample Date	Grid Open ings	Filter Status Non Analyzed			ter > 0.	ength Lengt .5 to 5 u to 10	h 5 Length >	Total Total Conc. LA Count L	I A: LA R: 5:	spect Length atio < 0.5 u	< Dia- meter > 0.5u	Length 0.5 to 5	Length to 10 u	5 Length : 10 u	Total Conc. 0	Total C Count C	Aspect   Ratio <   5:1	Length Dia < 0.5 u me 0.5		ngth Le i to 5 u to	ength 5 Length 10 u 10 u	h > Total Conc. OA	Total Count OA
	213 Granny's Garden Rd	Blank		Dust	Unknown			N/A	12/6/2001	10								0							(	J						0
	5000 Highway 37 N	Biarin	NA	Air	N/A	Stationary	Lot Blank	N/A	9/22/2001	10								0							(	J						0
	Multiple Addresses	NA		Dust	N/A		Lot Blank	N/A	4/30/2003	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	) 0	0	0	0	0	0	0 0
	Multiple Addresses		NA	Dust	N/A		Lot Blank	N/A	6/9/2003	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	) 0	0	0	0	0	0	0 0
	Multiple Addresses		NA NA	Dust	N/A		Lot Blank	N/A	6/9/2003	10		0	0	U	0	U	0	0	0	U	U	U	U	U	0 (	J 0	0	- 0	- 0	0	0	0 0
	Multiple Addresses		NA	Dust	N/A		Lot Blank	N/A	6/9/2003	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	) 0	0	0	- 0	0	0	0 0
	Multiple Addresses		NA NA	Dust	N/A		Lot Blank	N/A	6/10/2003	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	) 0	0	- 0	- 0	0	0	0 0
	Multiple Addresses		NA	Dust	N/A		Lot Blank	N/A	6/10/2003	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	) 0	0	0	- 0	0	0	0 0
	Multiple Addresses		NA NA	Dust	N/A		Lot Blank	N/A	6/10/2003	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	) 0	0	- 0	- 0	0	0	0 0
	Multiple Addresses		NA NA	Dust	N/A		Lot Blank	N/A	6/10/2003	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	) 0	0	0	- 0	0	0	0 0
	Multiple Addresses	NA	NA NA	Dust	N/A			N/A	6/10/2003	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	) 0	0	- 0	- 0	0	0	0 0
	Multiple Addresses Multiple Addresses		NA NA	Dust	N/A N/A		Lot Blank	N/A	6/10/2003 6/10/2003	10 10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	) 0	0	- 0	- 0	0	0	0 0
	Multiple Addresses		NA NA	Dust	N/A N/A		Lot Blank	N/A N/A	6/10/2003	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	0 0	0	- 0	0	0	0	0 0
	Multiple Addresses		NA NA	Dust	N/A		Lot Blank Lot Blank	N/A	6/10/2003	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	0 0	1 0	0	- 0	0	0	0 0
	Multiple Addresses	NA NA	NA	Dust	N/A		Lot Blank	N/A	6/10/2003	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	0 0	0	- 0	- 0	0	0	0 0
	Multiple Addresses		NA NA	Dust Dust	N/A		Lot Blank	N/A	6/10/2003	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	0 0	- 0	- 0	- 0	0	0	0 0
	Multiple Addresses	NA	NΔ	Air	N/A	Stationary	Lot Blank	N/A	9/9/2002	10		0	U	U	U	0	, 0	0	U	U	U	U	U	0	0 (	0	<del></del>			U		0 0
	Multiple Addresses	NA	147	Air	N/A	Stationary	Lot Blank	N/A	9/11/2002	10								0								0					-	0
	Multiple Addresses	NA		Air	N/A	Stationary	Lot Blank	N/A	9/23/2002	10								0								0					-	0
1-01597			Lot Blank	Air	N/A	Personal	Lot Blank	N/A	6/21/2000	10								0								0					-	0
1-01828			Lot Blank	Air	N/A	Personal	Lot Blank	N/A	8/29/2000	10								0								0					-	0
	NA		NA	Air	N/A	Stationary	Lot Blank	N/A	10/5/2000	10								0								0		-				0
1-03596		Blank	NA	Dust	Unknown	Otationary	Lot Blank	N/A	12/5/2001	10								0								0		-				0
1-07143		Blank	NA	Dust	N/A		Lot Blank	N/A	1/7/2003	10								0							(	0						0
1-07144		Blank	NA	Dust	N/A		Lot Blank	N/A	1/7/2003	10								0								0		-			+	0
1-07145			NA	Dust	N/A		Lot Blank	N/A	1/7/2003	10								0			1		1		ì	0		-	-		+	0
1-07146		Blank	NA	Dust	N/A		Lot Blank	N/A	1/7/2003	10								0			1		1		(	0		-	-		+	0
1-07147			NA	Dust	N/A		Lot Blank	N/A	1/7/2003	10								0							(	0						0
1R-04018	NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A	11/16/2000	10								0							(	0						0
VC-00071	NA	Blank	Lot Blank	Dust	N/A		Lot Blank	N/A	1/19/2000	10								0							(	0						0
VC-00072		Blank	Lot Blank	Dust	N/A		Lot Blank	N/A	1/19/2000	10								0							(	0						0

Page 2 of 9												Air, Dust (PCI	W & AHERA-A	5 I IVI)										1/2	/29/2009, 4:18 PM
Appendix C - Lil	by Sube	rfund Site Lot Blar	nk Data a	s of February 2	24, 2008																				
Note: The report ex	xcludes all	Lab QC results, such	as those a	ssociated with La	b Blanks,	Lab Duplicate	es, Re-Prepa	ration, Re-c	ount Sam	e, Re-coi	unt Different	Verified Analy	ysis, etc.								"				
																		AHE	RA / ASTM 5755						
												PCM (METHOD - NIOSH 7400)													
															bby Amphiboles ( L			Chrysotile ( C )			ner Amphiboles (			Total Asbesto	
Sample ID Scenario	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category		ol (air=L)/ Area	Sample Date	Fibers/CC	Filter Status Non	S<5u S>5u	Analytical Sensitivity	Asb conc (Air = S/cc)	S<5u S>5u	Analytical Sensitivity	Asb conc (Air = S/cc)	S<5u S>5u	Analytical Sensitivity	Asb conc (Air = S/cc) or	Asbestos Type	S<5u S>5u	Su Asb conc (Air = S/cc) or
		(Location)	Group	(Oub Location)	Type		Type			ust=cm²)			Analyzed		(Air = S/cc) or	or		(Air = S/cc) or	or		(Air = S/cc) or	(Dust = S/cm <sup>2</sup> )	Identified		(Dust = S/cm <sup>2</sup> )
															(Dust = S/cm <sup>2</sup> )	(Dust = S/cm <sup>2</sup> )		(Dust = S/cm <sup>2</sup> )	(Dust = S/cm <sup>2</sup> )		(Dust = S/cm <sup>2</sup> )				
1R-13674 N/A		303 W. Thomas St	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		11/15/2001					J ,			,				UNK		
1R-21218 N/A		318 Louisiana Ave	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		6/27/2003												ONIC	0	0
1R-21219 N/A 1R-21220 N/A		318 Louisiana Ave 318 Louisiana Ave	Blank Blank	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/27/2003 6/27/2003													0	0
1R-05626 N/A		5000 Highway 37 N	Blank	NA NA	Air	N/A	Stationary	Lot Blank	N/A		6/27/2003												UNK	0	0
1R-05627 N/A 1R-09378 N/A		5000 Highway 37 N 5000 Highway 37 N	Blank Blank	NA NA	Air Air	N/A N/A	Stationary	Lot Blank Lot Blank	N/A N/A		6/27/2001 9/22/2001												UNK UNK	0	0
1R-13572 N/A		5000 Highway 37 N	Blank	NA NA	Air	N/A	Stationary	Lot Blank	N/A		11/16/2001												UNK	0	0
1-07611 N/A 1-07612 N/A		Multiple Addresses Multiple Addresses	NA NA	Lot 23514 Lot 23514	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/3/2003													0	0
1-07613 N/A		Multiple Addresses	NA NA	Lot 23514	Air	N/A	Stationary	Lot Blank	N/A		3/3/2003 3/3/2003													0	0
1-07614 N/A 1-07615 N/A		Multiple Addresses Multiple Addresses	NA NA	Lot 23514 Lot 23514	Air Air	N/A N/A	Stationary Stationary	Lot Blank	N/A N/A		3/3/2003 3/3/2003													0	0
1-07615 N/A 1-07616 N/A		Multiple Addresses	NA NA	Lot 23514 Lot 23514	Air	N/A N/A	Stationary	Lot Blank Lot Blank	N/A N/A		3/3/2003													0	0
1-07617 N/A		Multiple Addresses Multiple Addresses	NA NA	Lot 23514 Lot 23514	Air	N/A N/A	Stationary	Lot Blank	N/A		3/3/2003													0	0
1-07618 N/A 1-07619 N/A		Multiple Addresses	NA NA	Lot 23514	Air Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/3/2003 3/3/2003													0	0
1-07620 N/A 1-07621 N/A		Multiple Addresses Multiple Addresses	NA NA	Lot 23514 Lot 23514	Air Air	N/A N/A	Stationary	Lot Blank	N/A N/A		3/3/2003 3/3/2003													0	0
1-07622 N/A		Multiple Addresses	NA NA	Lot 23514 Lot 23514	Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/3/2003													0	0
1-07623 N/A		Multiple Addresses Multiple Addresses	NA NA	Lot 23514 Lot 23514	Air	N/A N/A	Stationary	Lot Blank	N/A		3/3/2003													0	0
1-07624 N/A 1-07625 N/A		Multiple Addresses	NA NA	Lot 23514	Air Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/3/2003 3/3/2003													0	0
1-07626 N/A		Multiple Addresses Multiple Addresses	NA NA	Lot 23514 Lot 23514	Air	N/A N/A	Stationary	Lot Blank	N/A		3/3/2003													0	0
1-07627 N/A 1-07628 N/A		Multiple Addresses	NA NA	Lot 23514	Air Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/3/2003 3/3/2003													0	0
1-07629 N/A		Multiple Addresses	NA NA	Lot 23514	Air	N/A	Stationary	Lot Blank	N/A		3/3/2003													0	0
1-07630 N/A 1D-04245 N/A		Multiple Addresses Multiple Addresses	NA NA	Lot 23514 Blank	Air Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	3/3/2003 11/7/2005			0	0		0 0	,		0	0			0	0
1R-14090 N/A		Multiple Addresses	NA NA	NA NA	Air	N/A	Stationary	Lot Blank	N/A		6/17/2002													0	0
1R-14506 N/A 1R-15056 N/A		Multiple Addresses Multiple Addresses	NA NA	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		8/12/2002 9/9/2002													0	0
1R-15218 N/A		Multiple Addresses	NA NA		Air	N/A	Stationary	Lot Blank	N/A		9/11/2002													0	0
1R-15343 N/A 1R-19053 N/A		Multiple Addresses Multiple Addresses	NA NA	NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		9/23/2002 4/11/2003													0	0
1R-19054 N/A		Multiple Addresses	NA NA	NA NA	Air	N/A	Stationary	Lot Blank	N/A		4/11/2003													0	0
1R-19055 N/A 1R-19056 N/A		Multiple Addresses Multiple Addresses	NA NA	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/11/2003 4/11/2003													0	0
1R-19057 N/A		Multiple Addresses	NA NA	NA	Air	N/A	Stationary	Lot Blank	N/A		4/11/2003													0	0
1R-19058 N/A 1R-19059 N/A		Multiple Addresses Multiple Addresses	NA NA	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/11/2003 4/11/2003													0	0
1R-19060 N/A		Multiple Addresses	NA NA	NA NA	Air	N/A N/A	Stationary	Lot Blank	N/A		4/11/2003													0	0
1R-19218 N/A 1R-19219 N/A		Multiple Addresses Multiple Addresses	NA NA	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/11/2003 4/11/2003													0	0
1R-19474 N/A		Multiple Addresses	NA NA	NA NA	Air	N/A	Stationary	Lot Blank	N/A		4/16/2003													0	0
1R-19475 N/A 1R-19476 N/A		Multiple Addresses Multiple Addresses	NA NA	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/16/2003 4/16/2003													0	0
1R-19477 N/A		Multiple Addresses	NA NA	NA	Air	N/A	Stationary	Lot Blank	N/A		4/16/2003													0	0
1R-19641 N/A 1R-19642 N/A		Multiple Addresses Multiple Addresses	NA NA		Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/23/2003 4/23/2003													0	0
1R-19643 N/A		Multiple Addresses	NA NA		Air	N/A	Stationary	Lot Blank	N/A		4/23/2003													0	0
1R-19644 N/A 1R-19645 N/A		Multiple Addresses Multiple Addresses	NA NA		Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/23/2003 4/23/2003													0	0
1R-19646 N/A 1R-19647 N/A		Multiple Addresses	NA NA		Air	N/A N/A	Stationary	Lot Blank	N/A		4/23/2003													0	0
1R-19647 N/A 1R-19648 N/A		Multiple Addresses Multiple Addresses	NA	<u> </u>	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/23/2003 4/23/2003													0	0
1R-19649 N/A 1R-19650 N/A		Multiple Addresses Multiple Addresses	NA NA		Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/23/2003 4/23/2003													0	0
1R-19651 N/A		Multiple Addresses	NA NA		Air	N/A	Stationary	Lot Blank	N/A		4/23/2003													0	0
1R-19652 N/A 1R-19653 N/A	<u> </u>	Multiple Addresses Multiple Addresses	NA NA		Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/23/2003 4/23/2003													0	0
1R-19654 N/A		Multiple Addresses	NA		Air	N/A	Stationary	Lot Blank	N/A N/A		4/23/2003													0	0
1R-19655 N/A 1R-19656 N/A	<u> </u>	Multiple Addresses Multiple Addresses	NA NA		Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/23/2003 4/23/2003													0	0
1R-20681 N/A		Multiple Addresses	NA	NA	Air	N/A	Stationary	Lot Blank	N/A		6/2/2003													0	0
1R-20682 N/A 1R-20683 N/A	<u> </u>	Multiple Addresses Multiple Addresses	NA NA	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/2/2003 6/2/2003													0	0
1R-20684 N/A		Multiple Addresses	NA	NA	Air	N/A	Stationary	Lot Blank	N/A		6/2/2003													0	0
1R-20685 N/A 1R-20686 N/A	<u> </u>	Multiple Addresses Multiple Addresses	NA NA	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/2/2003 6/2/2003													0	0
1R-20687 N/A		Multiple Addresses	NA	NA	Air	N/A	Stationary	Lot Blank	N/A		6/2/2003													0	0
1R-20688 N/A 1R-20689 N/A		Multiple Addresses Multiple Addresses	NA NA	NA NA	Air Air	N/A N/A	Stationary	Lot Blank	N/A N/A		6/2/2003 6/2/2003													0	0
1R-20690 N/A		Multiple Addresses	NA	NA	Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/2/2003													0	0
1R-20691 N/A		Multiple Addresses		NA NA	Air	N/A N/A	Stationary	Lot Blank	N/A		6/2/2003													0	0
1R-20692 N/A		Multiple Addresses	NA	INC	Air	N/A	Stationary	Lot Blank	N/A		6/2/2003											1 1		0	0

																				A	HERA / ASTM 5	755							
												(METHOD - SH 7400)																	
Sample ID Scenario	Task Property Group	Sample	Location Descrip	tion Media	Matrix	Sample	Category	Pre	Vol (air=L)/	Sample Date	Fib	bers/CC	Filter Status	S<5u	S>5u	Amphiboles ( LA ) Analytical	Asb conc	S<5u		nrysotile ( C ) Analytical	Asb conc	S<5u		er Amphiboles ( Analytical		nc (Air = A		otal Asbes	
	(Location)	Group	(Sub Location	) Type		Type		Post Clear	Area (dust=cm <sup>2</sup> )				Non Analyzed		(.	Sensitivity Air = S/cc) or	(Air = S/cc) or			Sensitivity Air = S/cc) or	(Air = S/c	c)		Sensitivity (Air = S/cc) or			Type lentified		= S/cc) or (Dust = S/cm <sup>2</sup> )
															1)	Dust = S/cm <sup>2</sup> )	(Dust = S/cm <sup>2</sup> )		(D	oust = S/cm <sup>2</sup> )	(Dust = S/cm <sup>2</sup> )			(Dust = S/cm <sup>2</sup> )	)   '				
1R-20693 N/A	Multiple Address	es NA	NA	Air	N/A	Stationary	Lot Blank	N/A		6/2/2003	1																	0	0
1R-20694 N/A 1R-20695 N/A	Multiple Address Multiple Address		NA NA	Air Air	N/A N/A	Stationary	Lot Blank Lot Blank	N/A N/A		6/2/2003 6/2/2003																		0	0
1R-20696 N/A	Multiple Address	es NA	NA	Air	N/A	Stationary	Lot Blank	N/A		6/2/2003																		0	0
1R-20697 N/A 1R-20698 N/A	Multiple Address Multiple Address		NA NA	Air Air	N/A N/A	Stationary	Lot Blank Lot Blank	N/A N/A		6/2/2003 6/2/2003																		0	0
1R-20699 N/A	Multiple Address		NA NA	Air	N/A	Stationary	Lot Blank	N/A		6/2/2003																		0	0
1R-20700 N/A 1R-21243 N/A	Multiple Address Multiple Address		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/2/2003 6/24/2003																		0	0
1R-23141 N/A 1R-23142 N/A	Multiple Address Multiple Address			Air Air	N/A N/A	Stationary	Lot Blank Lot Blank	N/A N/A		9/19/2003 9/19/2003				0	0			0	0				0 0					0	0
1R-23143 N/A	Multiple Address	es NA		Air	N/A	Stationary	Lot Blank	N/A		9/19/2003				0	0			0	0				0 0					0	0
1R-23144 N/A 1R-23145 N/A	Multiple Address Multiple Address			Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		9/19/2003 9/19/2003				0	0			0	0				0 0					0	0
1R-23146 N/A	Multiple Address	es NA		Air	N/A	Stationary	Lot Blank	N/A		9/19/2003				0	0			0	0				0 0					0	0
1R-23147 N/A 1R-23148 N/A	Multiple Address Multiple Address			Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		9/19/2003 9/19/2003				0	0			0	0				0 0					0	0
1R-23149 N/A	Multiple Address			Air	N/A	Stationary	Lot Blank	N/A		9/19/2003				0	0			0	0				0 0					0	0
1R-23150 N/A 1R-23151 N/A	Multiple Address Multiple Address			Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		9/19/2003 9/19/2003	$\pm \pm$			0	0			0	0				0 0					0	0 0
1R-23152 N/A 1R-23153 N/A	Multiple Address Multiple Address			Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		9/19/2003 9/19/2003				0	0			0	0	-			0 0					0	0
1R-23154 N/A	Multiple Address	es NA		Air	N/A	Stationary	Lot Blank	N/A		9/19/2003				0	0			0	0				0 0					0	0
1R-23155 N/A 1R-23156 N/A	Multiple Address Multiple Address		_	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		9/19/2003 9/19/2003	+			0	0			0	0				0 0					0	0
1R-23157 N/A	Multiple Address	es NA		Air	N/A	Stationary	Lot Blank	N/A		9/19/2003				0	0			0	0				0 0					0	0
1R-23158 N/A 1R-23159 N/A	Multiple Address Multiple Address			Air	N/A N/A	Stationary	Lot Blank Lot Blank	N/A N/A		9/19/2003 9/19/2003				0	0			0	0				0 0					0	0
1R-23160 N/A	Multiple Address	es NA		Air	N/A	Stationary	Lot Blank	N/A		9/19/2003				0	0			0	0				0 0					0	0
CS-13161 N/A CS-13162 N/A	Multiple Address Multiple Address		NA NA	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A		6/20/2003 6/20/2003																		0	0
CS-14697 N/A	Multiple Address		NA	Dust	N/A		Lot Blank	N/A		9/23/2003				0	0			0	0				0 0					0	0
CS-14698 N/A CS-14699 N/A	Multiple Address Multiple Address		NA NA	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A		9/23/2003 9/23/2003				0	0			0	0				0 0					0	0
CS-14700 N/A	Multiple Address		NA NA	Dust	N/A	Otationan	Lot Blank	N/A		9/23/2003				0	0			0	0				0 0					0	0
1-07148 N/A 1-07158 N/A	NA NA	Blank Blank	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		1/7/2003 1/7/2003																		0	0
1-07159 N/A 1-07160 N/A	NA NA	Blank Blank		Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		1/7/2003 1/7/2003																		0	0
1-07161 N/A	NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		1/7/2003																		0	0
1-07162 N/A 1-07163 N/A	NA NA	Blank Blank		Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		1/7/2003 1/7/2003																		0	0
1-07164 N/A	NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		1/7/2003																		0	0
1-07165 N/A 1-07166 N/A	NA NA	Blank Blank	NA NA	Air	N/A N/A	Stationary	Lot Blank Lot Blank	N/A N/A		1/7/2003 1/7/2003																		0	0
1-07167 N/A	NA	Blank	NA	Air	Outdoor	Stationary	Lot Blank	N/A		1/7/2003																		0	0
1-08291 N/A 1-08292 N/A	NA NA	N/A Blank	Lot blank Lot blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/19/2006 6/19/2006				0	0			0	0				0 0					0	0
1-08293 N/A	NA NA	Blank		Air	N/A	Stationary	Lot Blank	N/A		6/19/2006				0	0			0	0				0 0					0	0
1-08294 N/A 1-08295 N/A	NA NA	Blank Blank		Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/19/2006 6/19/2006				0	0			0	0				0 0					0	0
1-08296 N/A	NA NA	Blank		Air	N/A N/A	Stationary	Lot Blank	N/A		6/19/2006				0	0			0	0				0 0					0	0
1-08297 N/A 1-08298 N/A	NA	Blank Blank	Lot blank	Air Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/19/2006 6/19/2006				0	0			0	0				0 0					0	0 0
1-08299 N/A 1-08300 N/A	NA NA	Blank Blank		Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/19/2006 6/19/2006	+			0	0			0	0				0 0					0	0
1-08301 N/A	NA	Blank	Lot blank	Air	N/A	Stationary	Lot Blank	N/A		6/20/2006				0	0			0	0				0 0					0	0
1-08302 N/A 1-08303 N/A	NA NA	Blank Blank		Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/20/2006 6/20/2006	++			0	0			0	0				0 0					0	0
1-08304 N/A	NA	Blank	Lot blank	Air	N/A	Stationary	Lot Blank	N/A		6/20/2006				0	0			0	0				0 0					0	0
1-08305 N/A 1-08306 N/A	NA NA	Blank Blank		Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/20/2006 6/20/2006	+			0	0			0	0				0 0					0	0
1-08307 N/A	NA NA	Blank Blank		Air	N/A	Stationary	Lot Blank	N/A		6/20/2006				0	0			0	0				0 0					0	0
1-08308 N/A 1-08309 N/A	NA	Blank	Lot blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/20/2006 6/20/2006				0	0			0	0				0 0					0	0
1-08310 N/A 1D-02787 N/A	NA NA	Blank Blank		Air Dust	N/A N/A	Stationary	Lot Blank Lot Blank	N/A N/A	0	6/20/2006 5/18/2005	$+ \blacksquare$		·	0	0			0	0				0 0					0	0
1D-02788 N/A	NA	Blank	Lot blank	Dust	N/A		Lot Blank	N/A	0	5/18/2005				0	0			0	0				0 0					0	0
1D-02789 N/A 1D-02790 N/A	NA NA	Blank Blank		Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0		++			0	0			0	0		+		0 0					0	0
1D-02791 N/A	NA	Blank	Lot blank	Dust	N/A		Lot Blank	N/A	0	5/18/2005				0	0			0	0				0 0	'				0	0
1D-02792 N/A 1D-02793 N/A	NA NA	Blank Blank		Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0		++			0	0			0	0				0 0					0	0
1D-02794 N/A	NA	Blank	Lot blank	Dust	N/A		Lot Blank	N/A	0	5/18/2005				0	0			0	0				0 0					0	0
1D-03452 N/A 1D-04241 N/A	NA NA	Blank Blank		Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0		+			0	0			0	0				0 0	1				0	0
1D-04242 N/A	NA NA	Blank		Dust	N/A		Lot Blank	N/A	0	11/7/2005				0	0			0	0				0 0					0	0
1D-04243 N/A 1D-04244 N/A	NA	Blank Blank		Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0					0	0			0	0				0 0					0	0 0
1D-04246 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	11/7/2005		-		0	0			0	0				0 0					0	0

											PCM (METHOD - NIOSH 7400)								AHERA / ASTM	5755						
											NIOSH 7400)			Libby Amp	hiboles ( L	A)		Chrysotile (	C)		Oth	ner Amphiboles (	DA )		Total Asbest	os
Sample ID Scenario Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Туре	Matrix	Sample Type	Category	Post Clear	Vol (air=L)/ Area (dust=cm²)		Fibers/CC	Filter Status Non Analyzed		Sen (Air =	alytical nsitivity = S/cc) or t = S/cm <sup>2</sup> )		S<5u S>5ı		Asb con (Air = S/ or or		u S>5u		Asb conc (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	Asbestos Type Identified		Su Asb conc (Air = S/cc) or (Dust = S/cm²)
1D-04247 N/A 1D-04248 N/A	NA NA	Blank Blank	Blank Blank	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	11/7/2005 11/7/2005			0	0			0	0			0 (	0			0	0
1D-04249 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	11/7/2005			0	0			0	0			0 (	0			0	0
1D-04250 N/A	NA NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	11/7/2005			0	0			0	0			0 (	0			0	0
1D-04251 N/A 1D-04252 N/A	NA NA	Blank Blank	Blank Blank	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	11/7/2005 11/7/2005			0	0			0	0			0 (	0			0	0
1D-04253 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	11/7/2005			0	0			0	0			0 (	0			0	0
1D-04254 N/A 1D-04255 N/A	NA NA	Blank Blank	Blank Blank	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	11/7/2005 11/7/2005			0	0			0	0			0 (	0			0	0
1D-04256 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	11/7/2005			0	0			0	0			0 (	0			0	0
1D-04257 N/A	NA NA	Blank Blank	Blank Blank	Dust	N/A N/A		Lot Blank	N/A	0	11/7/2005			0	0			0	0			0 (	0			0	0
1D-04258 N/A 1D-04259 N/A	NA NA	Blank	Blank	Dust Dust	N/A		Lot Blank Lot Blank	N/A N/A	0	11/7/2005 11/7/2005			0	0			0	0			0 (	0			0	0
1D-04260 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	11/7/2005			0	0			0	0			0 (	0			0	0
1D-04971 N/A 1D-04972 N/A	NA NA	Blank Blank	Lot blank Blank	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	7/26/2006 7/26/2006			0	0			0	0			0 (	0			0	0
1D-04973 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	7/26/2006			0	0			0	0			0 (	0			0	0
1D-04974 N/A 1D-04975 N/A	NA NA	Blank Blank	Blank Blank	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	7/26/2006 7/26/2006		1	0	0			0	0			0 (	0			0	0
1D-04976 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	7/26/2006			0	0			0	0			0 (	0			0	0
1D-04977 N/A 1D-04978 N/A	NA NA	Blank Blank	Blank Blank	Dust	N/A N/A		Lot Blank	N/A N/A	0	7/26/2006 7/26/2006		1	0	0			0	0			0 (	0			0	0
1D-04976 IV/A 1D-05041 N/A	NA NA	Blank	Blank	Dust Dust	N/A		Lot Blank Lot Blank	N/A	0	3/20/2006			0	0			0	0			0 (	0			0	0
1D-05042 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	3/20/2006			0	0			0	0			0 (	0			0	0
1D-05043 N/A 1D-05044 N/A	NA NA	Blank Blank	Blank Blank	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	3/20/2006 3/20/2006			0	0			0	0			0 (	0			0	0
1D-05045 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	3/20/2006			0	0			0	0			0 (	0			0	0
1D-05046 N/A 1D-05047 N/A	NA NA	Blank Blank	Blank Blank	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	3/20/2006 3/20/2006			0	0			0	0			0 (	0			0	0
1D-05047 N/A 1D-05048 N/A	NA NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	3/20/2006			0	0			0	0			0 0	0			0	0
1D-05842 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	5/4/2006			0	0			0	0			0 (	0			0	0
1D-05843 N/A 1D-05844 N/A	NA NA	Blank Blank	Blank Blank	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	5/4/2006 5/4/2006			0	0			0	0			0 (	0			0	0
1D-05940 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	5/8/2006			0	0			0	0			0 (	0			0	0
1D-05961 N/A 1D-05962 N/A	NA NA	Blank Blank	Blank Blank	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	5/8/2006 5/8/2006			0	0			0	0			0 (	0			0	0
1D-05962 N/A	NA NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	5/8/2006			0	0			0	0			0 (	0			0	0
1D-05964 N/A	NA NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	5/8/2006			0	0			0	0			0 (	0			0	0
1D-05965 N/A 1D-06970 N/A	NA NA	Blank Blank	Blank Blank	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	5/8/2006 9/20/2006			0	0			0	0			0 (	0			0	0
1D-06971 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	9/20/2006			0	0			0	0			0 (	0			0	0
1D-06972 N/A 1D-06973 N/A	NA NA	Blank Blank	Blank Blank	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	9/20/2006 9/20/2006			0	0			0	0			0 (	0			0	0
1D-06974 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	9/20/2006			0	0			0	0			0 (	0			0	0
1D-06975 N/A 1D-06976 N/A	NA NA	Blank Blank	Blank Blank	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A	0	9/20/2006 9/20/2006			0	0			0	0			0 (	0			0	0
1D-06977 N/A	NA	Blank	Blank	Dust	N/A		Lot Blank	N/A	0	9/20/2006			0	0			0	0			0 (	0			0	0
1D-06978 N/A 1D-06979 N/A	NA NA	Blank Blank	Blank	Dust	N/A		Lot Blank	N/A	0	9/20/2006			0	0			0	0			0 (	0			0	0
1R-20131 N/A	NA NA		NA	Dust Air	N/A N/A	Stationary	Lot Blank Lot Blank	N/A N/A	0	9/20/2006 11/4/2003			0	0			0	0			0 (	0			0	0
1R-20132 N/A	NA		NA	Air	N/A	Stationary	Lot Blank	N/A		11/4/2003			0	0			0	0			0 (	0			0	0
1R-20133 N/A 1R-20134 N/A	NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		11/4/2003 11/4/2003			0	0			0	0			0 (	0			0	0
1R-20135 N/A	NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		11/4/2003			0	0				0			0 (	0			0	0
1R-20136 N/A 1R-20137 N/A	NA NA	Blank Blank	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		11/4/2003 11/4/2003		1	0	0			0	0			0 (	0			0	0
1R-20138 N/A	NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		11/4/2003			0	0			0	0			0 (	0			0	0
1R-20139 N/A 1R-20140 N/A	NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		11/4/2003 11/4/2003		1	0	0			0	0			0 0	0			0	0
1R-20140 N/A 1R-21241 N/A	NA NA		NA NA	Air	N/A N/A	Stationary	Lot Blank	N/A		6/24/2003		1	U	0			U				0 (				0	0
1R-21242 N/A	NA NA		NA NA	Air		Stationary	Lot Blank	N/A		6/24/2003															0	0
1R-21244 N/A 1R-21245 N/A	NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/24/2003 6/24/2003		1						1			-				0	0
1R-21246 N/A	NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		6/24/2003															0	0
1R-21247 N/A 1R-21248 N/A	NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/24/2003 6/24/2003		1						1			+				0	0
1R-21249 N/A	NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		6/24/2003															0	0
1R-21250 N/A 1R-21281 N/A	NA NA		NA NA	Air		Stationary	Lot Blank	N/A		6/24/2003				-							+				0	0
1R-21281 N/A 1R-21282 N/A	NA NA		NA NA	Air Air		Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/27/2003 6/27/2003		1						+			+				0	0
1R-21283 N/A	NA	Blank	NA NA	Air	N/A	Stationary	Lot Blank	N/A		6/27/2003															0	0
1R-21284 N/A 1R-21285 N/A	NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/27/2003 6/27/2003								+			+				0	0
1R-21286 N/A	NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		6/27/2003															0	0
1R-21287 N/A 1R-21288 N/A	NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/27/2003 6/27/2003								1			+				0	0
1R-21289 N/A	NA		NA	Air		Stationary	Lot Blank	N/A	<u> </u>	6/27/2003															0	0
1R-21290 N/A	NA NA		NA NA	Air	N/A	Stationary	Lot Blank	N/A	<u> </u>	6/27/2003		1						1			1				0	0
1R-21291 N/A 1R-21292 N/A	NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/27/2003 6/27/2003								1			_				0	0
	1		1	7.01		- was or run y	Lo. Dialik	13//	1	5/2//2003	1 1	1				1		_1				1	1		٧,	~

											PCM (METHOD - NIOSH 7400)						AHE	RA / ASTM 5755	i					
											1400)		Li	bby Amphiboles (	LA)		Chrysotile ( C )		Oth	er Amphiboles ( C	DA)		Total Asbest	tos
Sample ID Scenario Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=L)/ Area (dust=cm²)	Sample Date	Fibers/CC	Filter Status Non Analyzed	S<5u S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	S<5u S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	S<5u S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	Asb conc (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	Asbestos Type Identified	S<5u S>	5u Asb conc (Air = S/cc) or (Dust = S/cm <sup>2</sup> )
1R-21293 N/A 1R-21294 N/A	NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		6/27/2003 6/27/2003													0	0
1R-21295 N/A	NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		6/27/2003													0	0
1R-21296 N/A 1R-21297 N/A	NA NA	Blank Blank	NA NA	Air Air	N/A N/A	Stationary	Lot Blank	N/A N/A		6/27/2003 6/27/2003													0	0
1R-24836 N/A	NA NA		LOT BLANK	Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A		3/2/2004			0	0		0	0		0 0				0	0
1R-24837 N/A	NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0		0	0		0 0				0	0
1R-24838 N/A 1R-24839 N/A	NA NA	Blank Blank	LOT BLANK LOT BLANK	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/2/2004 3/2/2004			0	0		0	0		0 0				0	0
1R-24840 N/A	NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0		0	0		0 0				0	0
1R-24841 N/A 1R-24842 N/A	NA NA	Blank Blank	LOT BLANK LOT BLANK	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/2/2004 3/2/2004			0	0		0	0		0 0				0	0
1R-24843 N/A	NA		LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		3/2/2004			0	0		0	0		0 0				0	0
1R-24844 N/A 1R-24845 N/A	NA NA	Blank Blank	LOT BLANK LOT BLANK	Air Air	N/A N/A	Stationary	Lot Blank	N/A N/A		3/2/2004 3/2/2004			0	0		0	0		0 0				0	0
1R-25200 N/A	NA NA	Blank	NA NA	Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A		4/26/2004			0	0		0	0		0 0	1			0	0
1R-25201 N/A	NA NA		NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0		0	0		0 0				0	0
1R-25202 N/A 1R-25203 N/A	NA NA	Blank Blank	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/26/2004 4/26/2004	1		0	0		0	0		0 0				0	0
1R-25204 N/A	NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0		0	0		0 0				0	0
1R-25205 N/A 1R-25206 N/A	NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/26/2004 4/26/2004			0	0		0	0		0 0				0	0
1R-25207 N/A	NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0		0	0		0 0				0	0
1R-25208 N/A	NA NA	Blank Blank	NA NA	Air Air	N/A N/A	Stationary	Lot Blank	N/A		4/26/2004			0	0		0	0		0 0				0	0
1R-25209 N/A 1R-25747 N/A	NA NA	Blank	BLANK	Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/26/2004 7/19/2004			0	0		0	0		0 0				0	0
1R-25748 N/A	NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0		0	0		0 0				0	0
1R-25749 N/A 1R-25750 N/A	NA NA	Blank Blank	BLANK BLANK	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		7/19/2004 7/19/2004			0	0		0	0		0 0				0	0
1R-25751 N/A	NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0		0	0		0 0				0	0
1R-25752 N/A 1R-25753 N/A	NA NA	Blank Blank	BLANK BLANK	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		7/19/2004 7/19/2004			0	0		0	0		0 0				0	0
1R-25753 N/A 1R-25754 N/A	NA NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0		0	0		0 0	1			0	0
1R-25755 N/A	NA NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		7/19/2004			0	0		0	0		0 0				0	0
1R-25756 N/A 1R-26080 N/A	NA NA	Blank Blank	BLANK Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		7/19/2004 8/10/2004			0	0		0	0		0 0				0	0
1R-26081 N/A	NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		8/10/2004			0	0		0	0		0 0				0	0
1R-26082 N/A 1R-26083 N/A	NA NA	Blank Blank	Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		8/10/2004 8/10/2004			0	0		0	0		0 0				0	0
1R-26084 N/A	NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		8/10/2004			0	0		0	0		0 0				0	0
1R-26085 N/A 1R-26086 N/A	NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		8/10/2004 8/10/2004			0	0		0	0		0 0				0	0
1R-26087 N/A	NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		8/10/2004			0	0		0	0		0 0				0	0
1R-26088 N/A	NA NA	Blank Blank	Blank Blank	Air	N/A	Stationary	Lot Blank	N/A		8/10/2004			0	0		0	0		0 0				0	0
1R-26089 N/A 1R-26809 N/A	NA NA	Blank	LOT BLANK	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		8/10/2004 9/16/2004			0	0		0	0		0 0				0	0
1R-26810 N/A	NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		9/16/2004			0	0		0	0		0 0				0	0
1R-26811 N/A 1R-26812 N/A	NA NA		LOT BLANK LOT BLANK	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		9/16/2004 9/16/2004			0	0		0	0		0 0				0	0
1R-26813 N/A	NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		9/16/2004			0	0		0	0		0 0				0	0
1R-26814 N/A 1R-26815 N/A	NA NA		LOT BLANK LOT BLANK	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		9/16/2004 9/16/2004			0	0	+	0	0		0 0				0	0
1R-26816 N/A	NA	Blank	LOT BLANK	Air	N/A	Stationary	Lot Blank	N/A		9/16/2004			0	0		0	0		0 0				0	0
1R-26817 N/A	NA NA		LOT BLANK LOT BLANK	Air Air	N/A N/A	Stationary	Lot Blank	N/A		9/16/2004			0	0	$\Box$	0	0		0 0				0	0
1R-26818 N/A 1R-27949 N/A	NA NA	Blank	BLANK	Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		9/16/2004 10/22/2004		1	0	0		0	0		0 0				0	0
1R-27950 N/A	NA NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		10/22/2004			0	0		0	0		0 0				0	0
1R-27951 N/A 1R-27952 N/A	NA NA	Blank Blank	BLANK BLANK	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		10/22/2004 10/22/2004		1	0	0			0		0 0				0	0
1R-27953 N/A	NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		10/22/2004			0	0		0	0		0 0				0	0
1R-27954 N/A 1R-27955 N/A	NA NA	Blank Blank	BLANK BLANK	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		10/22/2004 10/22/2004			0	0			0		0 0				0	0
1R-27956 N/A	NA	Blank	BLANK	Air	N/A	Stationary	Lot Blank	N/A		10/22/2004			0	0		0	0		0 0				0	0
1R-27957 N/A 1R-27958 N/A	NA NA	Blank Blank	BLANK BLANK	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		10/22/2004 10/22/2004			0	0	+	0	0		0 0				0	0
1R-28069 N/A	NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		11/3/2004			0	0		0	0		0 0				0	0
1R-28070 N/A	NA NA	Blank Blank	Blank Blank	Air	N/A N/A	Stationary	Lot Blank	N/A		11/3/2004		<u> </u>	0	0			0		0 0				0	0
1R-28071 N/A 1R-28072 N/A	NA NA		Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		11/3/2004 11/3/2004			0	0	+ + +	U	0		0 0				0	0
1R-28073 N/A	NA NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		11/3/2004			0	0		Ů,	0		0 0				0	0
1R-28074 N/A 1R-28075 N/A	NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		11/3/2004 11/3/2004		-	0	0		0	0		0 0				0	0
1R-28076 N/A	NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		11/3/2004			0	0		0	0		0 0				0	0
1R-28077 N/A 1R-28078 N/A	NA NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		11/3/2004 11/3/2004		<u> </u>	0	0	$\Box$	0	0		0 0				0	0
1R-28079 N/A	NA	Blank	Blank	Air	N/A N/A	Stationary	Lot Blank	N/A		11/3/2004			0	0		0	0		0 0				0	0
1R-28080 N/A	NA NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		11/3/2004			0	0		0	0		0 0				0	0
1R-28081 N/A 1R-28082 N/A	NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		11/3/2004 11/3/2004	+ +	1	0	0	+ + +	0	0		0 0				0	0
1R-28083 N/A	NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		11/3/2004			0	0		0	0		0 0				0	0

													ETHOD -								AH	IERA / ASTM 5	755							
												NIOSI	H 7400)			Libby	y Amphiboles ( LA	1		Chi	rysotile (C)			Oth	er Amphiboles (	ΟΔ )		т	otal Asbe	etos
Sample ID Scenario	) Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=L) Area (dust=cm <sup>2</sup>	/ Sample Date	Fibe	rs/CC I	Filter Status Non Analyzed	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm²)	Asb conc (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	S<5u S	>5u / S (Ai	Analytical Sensitivity iir = S/cc) or ust = S/cm <sup>2</sup> )	Asb conc (Air = S/co or (Dust = S/cm <sup>2</sup> )			Analytical Sensitivity (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	Asb cor	c) or		<5u S>	
1R-28084 N/A 1R-28085 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		11/3/2004 11/3/2004				0	0			0	0				0 0					0	0
1R-28086 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		11/3/2004				0	0			0	0				0 0					0	0
1R-28087 N/A 1R-28088 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		11/3/2004 11/3/2004				0	0			0	0				0 0					0	0
1R-29309 N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005				0	0			0	0				0 0					0	0
1R-29310 N/A 1R-29311 N/A		NA NA	Blank Blank	Lot Blank Lot Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/31/2005 3/31/2005				0	0			0	0				0 0					0	0
1R-29312 N/A		NA NA	Blank Blank	Lot Blank Lot Blank	Air	N/A N/A	Stationary	Lot Blank	N/A		3/31/2005				0	0			0	0				0 0					0	0
1R-29313 N/A 1R-29314 N/A		NA	Blank	Lot Blank	Air Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/31/2005 3/31/2005				0	0			0	0				0 0					0	0
1R-29315 N/A 1R-29316 N/A		NA NA	Blank Blank	Lot Blank Lot Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank	N/A N/A		3/31/2005 3/31/2005				0	0			0	0				0 0					0	0
1R-29317 N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank Lot Blank	N/A		3/31/2005				0	0			0	0				0 0					0	0
1R-29318 N/A 1R-29319 N/A		NA NA	Blank Blank	Lot Blank Lot Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/31/2005 3/31/2005				0	0			0	0				0 0					0	0
1R-29320 N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005				0	0			0	0				0 0					0	0
1R-29321 N/A 1R-29322 N/A		NA NA	Blank Blank	Lot Blank Lot Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/31/2005 3/31/2005				0	0			0	0				0 0					0	0
1R-29323 N/A		NA	Blank	Lot Blank	Air	N/A	Stationary	Lot Blank	N/A		3/31/2005				0	0			0	0				0 0					0	0
1R-29324 N/A 1R-29325 N/A		NA NA	Blank Blank	Lot Blank Lot Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/31/2005 3/31/2005				0	0			0	0				0 0					0	0
1R-29326 N/A		NA NA	Blank Blank	Lot Blank Lot Blank	Air	N/A N/A	Stationary	Lot Blank	N/A		3/31/2005				0	0			0	0				0 0					0	0
1R-29327 N/A 1R-29328 N/A		NA NA	Blank	Lot Blank	Air Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/31/2005 3/31/2005				0	0			0	0				0 0					0	0
1R-30268 N/A 1R-30392 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/22/2006 5/26/2005				0	0			0	0				0 0					0	0
1R-30393 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005				0	0			0	0				0 0					0	0
1R-30394 N/A 1R-30395 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		5/26/2005 5/26/2005				0	0			0	0				0 0					0	0
1R-30396 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005				0	0			0	0				0 0					0	0
1R-30397 N/A 1R-30398 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		5/26/2005 5/26/2005				0	0			0	0				0 0					0	0
1R-30399 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005				0	0			0	0				0 0					0	0
1R-30400 N/A 1R-30401 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		5/26/2005 5/26/2005				0	0			0	0				0 0					0	0
1R-30402 N/A		NA NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005				0	0			0	0				0 0					0	0
1R-30403 N/A 1R-30404 N/A		NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		5/26/2005 5/26/2005				0	0			0	0				0 0					0	0
1R-30405 N/A 1R-30406 N/A		NA NA	Blank Blank	Blank Blank	Air	N/A N/A	Stationary	Lot Blank	N/A N/A		5/26/2005				0	0			0	0			_	0 0					0	0
1R-30407 N/A		NA	Blank	Blank	Air Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A		5/26/2005 5/26/2005				0	0			0	0				0 0					0	0
1R-30408 N/A 1R-30409 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		5/26/2005 5/26/2005				0	0			0	0				0 0					0	0
1R-30410 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/26/2005				0	0			0	0				0 0					0	0
1R-30411 N/A 1R-31473 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		5/26/2005 7/6/2005				0	0			0	0				0 0					0	0
1R-31474 N/A		NA		Blank	Air	N/A	Stationary	Lot Blank	N/A		7/6/2005				0	0			0	0				0 0					0	0
1R-31475 N/A 1R-31476 N/A		NA NA		Blank	Air	N/A N/A	Stationary	Lot Blank Lot Blank	N/A N/A		7/6/2005 7/6/2005				0	0			0	0				0 0					0	0
1R-31477 N/A 1R-31478 N/A		NA NA		Blank Blank	Air	N/A N/A	Stationary	Lot Blank	N/A		7/6/2005				0	0			0	0				0 0					0	0
1R-31479 N/A		NA		Blank	Air Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		7/6/2005 7/6/2005				0	0			0	0				0 0					0	0
1R-31680 N/A 1R-31681 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		7/6/2005 7/6/2005				0	0			0	0				0 0		+ T			0	0
1R-31682 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		7/6/2005				0	0			0	0				0 0					0	0
1R-31683 N/A 1R-31684 N/A	1	NA NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		7/6/2005 7/6/2005				0	0			0	0				0 0					0	0
1R-31685 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		7/6/2005				0	0			0	0				0 0					0	0
1R-31686 N/A 1R-31687 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		7/6/2005 7/6/2005				0	0			0	0				0 0					0	0
1R-31688 N/A		NA NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		7/6/2005				0	0			0	0				0 0					0	0
1R-31689 N/A 1R-31690 N/A	+	NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		7/6/2005 7/6/2005				0	0			0	0				0 0					0	0
1R-31691 N/A 1R-31692 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Stationary	Lot Blank Lot Blank	N/A N/A		7/6/2005 7/6/2005				0	0			0	0				0 0					0	0
1R-32600 N/A		NA	Blank	NA	Air	N/A	Stationary Stationary	Lot Blank	N/A N/A		8/4/2005				0	0			0	0				0 0					0	0
1R-32601 N/A 1R-32602 N/A	<del> </del>	NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		8/4/2005 8/4/2005				0	0			0	0				0 0					0	0
1R-32603 N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		8/4/2005				0	0			0	0				0 0					0	0
1R-32604 N/A 1R-32605 N/A	1	NA NA	Blank Blank	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		8/4/2005 8/4/2005				0	0			0	0				0 0					0	0
1R-32606 N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		8/4/2005				0	0			0	0				0 0					0	0
1R-32607 N/A 1R-32608 N/A	-	NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		8/4/2005 8/4/2005				0	0			0	0				0 0					0	0
1R-32609 N/A	1	NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		8/4/2005				0	0			0	0				0 0					0	0
1R-32610 N/A 1R-32611 N/A	+	NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		8/4/2005 8/4/2005				0	0			0	0				0 0					0	0
1R-32612 N/A		NA NA	Blank Blank	NA NA	Air	N/A N/A	Stationary	Lot Blank	N/A		8/4/2005				0	0			0	0				0 0					0	0
1R-32613 N/A	1	INO	DIATIK	INC	Air	N/A	Stationary	Lot Blank	N/A	1	8/4/2005				0	0		1	0	0				0 0		1 1			0	0

												PCM (M	ETHOD -								АН	IERA / ASTM	5755						
												NIOSI	H 7400)	- 1		Libby	/ Amphiboles ( LA	,	1	Ch	rysotile ( C )			Oth	er Amphiboles (	04.)		 Total Asbes	estas
Sample ID Scenario	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=L)/ Area (dust=cm²)	Sample Date	Fibe	rs/CC F	Filter Status Non Analyzed	S<5u	S>5u	Analytical Sensitivity (Air = S/cc) or (Dust = S/cm²)	Asb conc (Air = S/cc) or (Dust = S/cm <sup>2</sup> )	S<5u S	>5u / S (Ai	Analytical Sensitivity ir = S/cc) or ust = S/cm²)	Asb cone (Air = S/o or (Dust = S/cm <sup>2</sup> )			Analytical Sensitivity (Air = S/cc) or (Dust = S/cm²)	Asb co S/o	cc) or	S<5u S>	
1R-32614 N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		8/4/2005				0	0			0	0				0 0	)			0	0
1R-32615 N/A 1R-32616 N/A		NA NA	Blank Blank	NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		8/4/2005 8/4/2005				0	0			0	0				0 0	)			0	0
1R-32617 N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		8/4/2005				0	0			0	0				0 0	)			0	0
1R-32618 N/A 1R-32619 N/A		NA NA		NA NA	Air Air	N/A N/A	Stationary	Lot Blank Lot Blank	N/A N/A		8/4/2005 8/4/2005				0	0			0	0				0 0	)			0	0
1R-33518 N/A		NA	Blank	NA .	Air	N/A	Personal	Lot Blank	N/A		10/4/2005				0	0			0	0				0 0	)			0	0
1R-33519 N/A 1R-33731 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Personal Stationary	Lot Blank Lot Blank	N/A N/A		10/4/2005 10/4/2005				0	0			0	0				0 0	)			0	0
1R-33732 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary	Lot Blank	N/A		10/4/2005				0	0			0	0				0 0	)			0	0
1R-33733 N/A 1R-33805 N/A		NA NA	Blank	Blank	Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		10/4/2005 10/4/2005				0	0			0	0				0 0	)			0	0
1R-33806 N/A 1R-33807 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		10/4/2005 10/4/2005				0	0			0	0				0 0	)			0	0
1R-33808 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005				0	0			0	0				0 0	)			0	0
1R-33809 N/A 1R-33810 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		10/4/2005 10/4/2005				0	0			0	0				0 0	)			0	0
1R-33811 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		10/4/2005				0	0			0	0				0 0	)			0	0
1R-33812 N/A 1R-33813 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		10/4/2005 10/4/2005				0	0			0	0				0 0	)			0	0
1R-33814 N/A		NA NA		Blank Blank	Air	N/A N/A	Stationary	Lot Blank	N/A		10/4/2005				0	0			0	0				0 0	)			0	0
1R-33815 N/A 1R-33816 N/A		NA	Blank Blank	Blank	Air Air	N/A		Lot Blank Lot Blank	N/A N/A		10/4/2005 10/4/2005				0	0			0	0				0 0	)			0	0
1R-33817 N/A 1R-33818 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A		Lot Blank Lot Blank	N/A N/A		10/4/2005 10/4/2005				0	0			0	0				0 0	)			0	0
1R-33819 N/A		NA	Blank	Blank	Air	N/A		Lot Blank	N/A		10/4/2005				0	0			0	0				0 0	)			0	0
1R-34016 N/A 1R-34017 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/22/2006 3/22/2006				0	0			0	0				0 0	)			0	0
1R-34018 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006				0	0			0	0				0 0	)			0	0
1R-34019 N/A 1R-34275 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/22/2006 3/22/2006				0	0			0	0				0 0	)			0	0
1R-34276 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006				0	0			0	0				0 0	)			0	0
1R-34277 N/A 1R-34278 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/22/2006 3/22/2006				0	0			0	0				0 0	)			0	0
1R-34279 N/A		NA NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/22/2006				0	0			0	0				0 0	)			0	0
1R-34794 N/A 1R-34795 N/A		NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/23/2006 3/23/2006				0	0			0	0				0 0	)			0	0
1R-34796 N/A 1R-34797 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/23/2006 3/23/2006				0	0			0	0				0 0	)			0	0
1R-34798 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/23/2006				0	0			0	0				0 0	)			0	0
1R-34799 N/A 1R-34800 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/23/2006 3/23/2006				0	0			0	0				0 0	)			0	0
1R-34801 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		3/23/2006				0	0			0	0				0 0	)			0	0
1R-34802 N/A 1R-34803 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		3/23/2006 3/23/2006				0	0			0	0				0 0	)			0	0
1R-35461 N/A		NA NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		4/26/2006				0	0			0	0				0 0	)			0	0
1R-35462 N/A 1R-35463 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/26/2006 4/26/2006				0	0			0	0				0 0	)			0	0
1R-35464 N/A 1R-35466 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/26/2006 4/26/2006				0	0			0	0				0 0	)			0	0
1R-35467 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		4/26/2006				0	0			0	0				0 0	)			0	0
1R-35468 N/A 1R-35469 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/26/2006 4/26/2006				0	0			0	0				0 0	)			0	0
1R-35470 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		4/26/2006				0	0			0	0				0 0	)			0	0
1R-35471 N/A 1R-35472 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/26/2006 4/26/2006				0	0			0	0				0 0				0	0
1R-35473 N/A		NA NA	Blank	Blank Blank	Air	N/A N/A	Stationary	Lot Blank	N/A		4/26/2006				0	0			0	0				0 0				0	0
1R-35474 N/A 1R-35475 N/A		NA		Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/26/2006 4/26/2006				0	0			0	0				0 0				0	0
1R-35476 N/A 1R-35477 N/A		NA NA	Blank Blank	Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/26/2006 4/26/2006				0	0			0	0				0 0		$\blacksquare$		0	0
1R-35478 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		4/26/2006				0	0			0	0				0 0				0	0
1R-35479 N/A 1R-35480 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		4/26/2006 5/1/2006	$\vdash$			0	0			0	0				0 0		$+\Gamma$		0	0
1R-35481 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		5/1/2006				0	0			0	0				0 0	)			0	0
1R-37606 N/A 1R-37607 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		7/28/2006 7/28/2006				0	0			0	0				0 0	)			0	0
1R-37608 N/A		NA NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	N/A		7/28/2006				0	0			0	0				0 0	)			0	0
1R-37609 N/A 1R-37610 N/A		NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		7/28/2006 7/28/2006				0	0			0	0				0 0				0	0
1R-37611 N/A 1R-37612 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Stationary	Lot Blank	N/A N/A		7/28/2006 7/28/2006				0	0			0	0				0 0	)			0	0
1R-37612 N/A 1R-37613 N/A		NA		Blank	Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		7/28/2006 7/28/2006				0	0			0	0				0 0	)			0	0
1R-37614 N/A 1R-37615 N/A		NA NA		Blank Blank	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		7/28/2006 7/28/2006	$\vdash \vdash$			0	0			0	0				0 0	1	$+\Gamma$		0	0
1R-38524 N/A		NA	Blank	Blank	Air	N/A	Stationary	Lot Blank	Clear		9/18/2006				0	0			0	0				0 0	)			0	0
1R-38632 N/A 1R-38633 N/A		NA NA		NA NA	Air Air	N/A N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		9/21/2006 9/21/2006				0	0			0	0				0 0				0	0
1R-38660 N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006				0	0			0	0				0 0				0	0
1R-38661 N/A	1	NA	Blank	INA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006				0	0			0	0				0 0	)			0	0

																					. AL	IERA / ASTM 575	E							
																					AH	IERA / ASIM 575	15							
													PCM (METHO																	
													NIOSH 7400	)							O (3)		_							
Samula ID	Caanaria	Took	Dramarty Crays	Cample	Lagatian December	Madia	Matrix	Comula	Catamani	Dra	Val (air I V	amula Data	Fibero/CC	Filton Status	s S<5u	S>5u	y Amphiboles (	Asb conc	C .E	ı S>5u	Chrysotile ( C ) Analytical	Asb conc	C .E	S>5u	er Amphiboles ( (		Asbestos	Total As		Asb conc (Air
Sample ID	Scenario	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	месіа Туре	Watrix	Sample Type	Category	Pre Post	Vol (air=L)/ Sa Area	ample Date	Fibers/CC	Filter Status Non	s 5<5u	5>5u	Analytical Sensitivity	(Air = S/cc)		5>5u	Sensitivity	(Air = S/cc)		5>5u	Analytical Sensitivity	Asb conc (Air = S/cc) or	Type	5<5u	5>5u	= S/cc) or
			(Location)	Croup	(oub Locution)	Type		1,400		Clear	(dust=cm <sup>2</sup> )			Analyzed			(Air = S/cc) or	or	<b>'</b>		(Air = S/cc) or	or			(Air = S/cc) or	(Dust = S/cm <sup>2</sup> )	Identified			(Dust = S/cm <sup>2</sup> )
											( ,						(Dust = S/cm <sup>2</sup> )	(Dust =			(Dust = S/cm <sup>2</sup> )	(Dust =			(Dust = S/cm <sup>2</sup> )	(,				
																		S/cm <sup>2</sup> )				S/cm <sup>2</sup> )								
1R-38662	N/A		NA	Blank	NΔ	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0				0 0	,			0 0					0	
1R-38663			NA NA	Blank		Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0				0 0				0 0				0	0	
1R-38664			NA	Blank		Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0				0 0	)			0 0				0	0	<del>.  </del>
1R-38665	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0	)			0 0	)			0 0				0	0	
1R-38666	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0	1			0 0	)			0 0	)			0	0	
1R-38667	N/A		NA	Blank	NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0	)			0 0	)			0 0	)			0	0	
1R-38668			NA	Blank		Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0			, and the second	0 0				0 0			-	0	0	
1R-38669			NA	Blank		Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0	)			0 0	)			0 0				0	0	
1R-38670			NA	Blank		Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0	)			0 0	)			0 0	)			0	0	
1R-38671	-		NA		NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0	)			0 0	)			0 0	)			0	0	
1R-38672			NA	Blank		Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0	)			0 0	)			0 0	)			0	0	
1R-38673			NA		NA Distrib	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0	)			0 0	)			0 0	)			0	0	
1R-38674			NA NA		Blank NA	Air	N/A N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0	1			0 0	)			0 0	)			0	0	
1R-38675 1R-38676			NA NA		NA NA	Air Air	N/A	Stationary Stationary	Lot Blank Lot Blank	N/A N/A		9/20/2006			0	0	1			0 0	,			0 0	,			0	0	
1R-38677			NA NA		NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0				0 0	1			0 0	1	+ +		0	0	
1R-38678			NA		NA	Air	N/A	Stationary	Lot Blank	N/A		9/20/2006			0	0				0 0	1			0 0	1			0	0	
CS-16435			NA		NA	Air	N/A	Stationary	Lot Blank	N/A		11/6/2003			0	0				0 0	)			0 0	)			0	0	
CS-16436			NA	Blank	NA	Dust	N/A	Cialionary	Lot Blank	N/A		11/6/2003			0	0				0 0	)		_	0 0				0	0	
CS-17461			NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0	)			0 0	)			0 0				0	0	
CS-17462			NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0	)			0 0	)			0 0	)			0	0	
CS-17463	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0				0 0	)			0 0	)			0	0	
CS-17464	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0	)			0 0	)			0 0	)			0	0	
CS-17465	N/A		NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0	)			0 0	)			0 0	)			0	0	
CS-17466			NA	Blank	NA	Dust	N/A		Lot Blank	N/A		9/23/2003			0	0	)			0 0	)			0 0				0	0	
CS-17467			NA	Blank		Dust	N/A		Lot Blank	N/A	!	9/23/2003			0	0	)			0 0	)			0 0	)			0	0	
CS-17468			NA	Blank		Dust	N/A		Lot Blank	N/A		9/23/2003			0	0	)			0 0	)			0 0	)			0	0	
CS-17469			NA	Blank		Dust	N/A		Lot Blank	N/A		9/23/2003			0	0	)			0 0	)		_	0 0	)			0	0	
CS-17470			NA	Blank		Dust	N/A		Lot Blank	N/A		9/23/2003			0	0	)			0 0	)			0 0	)			0	0	
CS-17471			NA	Blank		Dust	N/A		Lot Blank	N/A		9/23/2003			0	0	1			0 0	)			0 0	)			0	0	
CS-17472			NA	Blank		Dust	N/A		Lot Blank	N/A		9/23/2003			0	0	)			0 0	)			0 0	)			0	0	
CS-17473 CS-17474			NA NA	Blank Blank	NA NA	Dust	N/A N/A		Lot Blank	N/A		9/23/2003		_	0	0				0 0				0 0				0	0	
CS-17474 CS-17475			NA NA	Blank	1 22 2	Dust Dust	N/A N/A		Lot Blank Lot Blank	N/A N/A		9/23/2003			0	0				0 0	1			0 0	,	<del>                                     </del>		0	0	
CS-17475 CS-17476			NA NA		NA	Dust	N/A		Lot Blank	N/A N/A		9/23/2003		+	0	0				0 0				0 0	,	+ +		0	0	
CS-17476 CS-18917			NA NA	-	NA NA	Air	N/A	Stationary	Lot Blank	N/A		2/26/2004			0	0				0 0				0 0	ń	+ +		0	0	
CS-18917 CS-18918			NA NA		NA	Air	N/A	Stationary	Lot Blank	N/A		2/26/2004			0	0				0 0				0 0				0	0	
1R-04659			Rainy Creek Rd		NA	Air	N/A	Stationary	Lot Blank	N/A		5/12/2001								- 0				- 0			UNK	0	0	
1R-04660			Rainy Creek Rd		NA	Air	N/A	Stationary	Lot Blank	N/A		5/12/2001														1 1	UNK	0	0	

Appendix C - Li	bby Suberf	fund Site I	Lot Blank	Data as o	of Februa	arv 24.	2008												1														
Appointment C						, <u>-</u> .,																											
Note: The report	excludes all I	ab QC res	ults such:	as those as	sociated	with Lah	Blanks I	ah Dunli	icates Re-Pi	reparation	Re-count S	ame, Re-count Differer	nt Verified Analysis	etc					1				1									1	
TTOTOT THE TOPORT	DAGIGGGG GII E		l	ae 111000 ac	l	THE LOS	January 2	Las Bap.	loutoo, rto r i	ropuration, i	To occurre o	I I I I I I I I I I I I I I I I I I I	it, voimou / maiyolo,	1												AHERA / ASTM 57	755						
																		PCM (METHOD -															
																		NIOSH 7400)			Li	Libby Amphiboles ( LA )			Chrysotile ( C )			Oth	er Amphiboles ( O/	١)		Total A	Asbestos
																		14100117400)	-								_	T T					
				Field Sample										SSN		Pre	Vol (Air=L)		Filter Stat	us		Analytical Sensitivity As	sb conc (Air =		Analytical Sensitiv	rity Asb conc (Air =		A	nalytical Sensitivity	Asb conc (Air =			Asb conc (Air =
Property Group				Data Sheet	Logbook	Media					Sample	Location Description		(last 4		Post	or		Non			(Air = S/cc) or (Dust =	S/cc) or		(Air = S/cc) or (Du	ist S/cc) or		(A	ir = S/cc) or (Dust	S/cc) or	Asbestos Type		S/cc) or
(Location)	Sample ID	Parent ID	Sample Date		Number	Type			xg,	Location I		(Sub Location)	Field Comments	digits)	Scenario Task		Area (Dust=cm²)	Fibers/cc	Analyzed	d S<5u	ı S>5u	S/cm <sup>2</sup> ) (I	Dust = S/cm <sup>2</sup> )	S<5u S>5u	= S/cm <sup>2</sup> )	(Dust = S/cm <sup>2</sup> )	S<5u	S>5u	S/cm <sup>2</sup> )	(Dust = S/cm <sup>2</sup> )	Identified	S<5u	S>5u (Dust = S/cm <sup>2</sup> )
NA	AA-00201		10/13/2006		100663	Air	Stationary		Lot Blank	AD-000001	Blank	Lot blank	Lot #12609		N/A	N/A					0 0			0 0			C	0 0				0	0
NA	AA-00202		10/13/2006		100663	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Lot blank	Lot #12609		N/A	N/A					0 0			0 0			C	0 0				0	0
NA NA	AA-00341 AA-00342		11/15/2006		100673	Air	Stationary		Lot Blank Lot Blank	AD-000001 AD-000001	Blank	Blank Blank	Lot #13409 Lot #13409		N/A N/A	N/A N/A					0 0			0 0				0 0				0	0
NA NA	AA-00342 AA-00343		11/15/2006			AIF	Stationary	N/A	Lot Blank	AD-000001 AD-000001	Blank	Blank	Lot #13409		N/A N/A	N/A N/A					0 0			0 0				0				0	0
NA	AA-00343 AA-00344		11/15/2006		100673	Air	Stationary Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13409		N/A	N/A			+	-	0 0			0 0			-	0				0	0
NA	AA-00345		11/15/2006		100673	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13409		N/A	N/A			1	+	0 0			0 0			1 0	0 0				0	0
NA	AA-00346		11/15/2006		100673	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13409		N/A	N/A					0 0			0 0				0 0				0	0
NA	AA-00347		11/15/2006	SA-005088	100673	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13409		N/A	N/A					0 0			0 0			0	0 0				0	0
NA	AA-00348		11/15/2006	SA-005088	100673	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13409		N/A	N/A					0 0			0 0				0 0				0	0
NA	AA-00349		11/15/2006		100673	Air	Stationary		Lot Blank	AD-000001	Blank	Blank	Lot #13409		N/A	N/A					0 0			0 0			C	0 0				0	0
NA	AA-00350		11/15/2006		100673	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13409		N/A	N/A					0 0			0 0			C	0 0				0	0
NA	AA-00596		.,	SA-004886	100614	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Cassette Lot #13518		N/A	N/A N/A					0 0			0 0			C	0 0				0	0
NA NA	AA-00597 AA-00598		1/22/2007	SA-004886	100614	Air	Stationary	N/A	Lot Blank Lot Blank	AD-000001 AD-000001	Blank	Blank	Cassette Lot #13518 Cassette Lot #13518		N/A N/A	N/A N/A					0 0			0 0				0 0				0	0
NΔ	AA-00598 AA-00599		1/22/2007	SA-004886 SA-005054	100614	All	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Cassette Lot #13518		N/A	N/A					0 0			0 0				0 0				0	0
NA	AA-00599 AA-00600		1/22/2007	SA-005054	100614	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Cassette Lot #13518		N/A	N/A					0 0			0 0			-	0 0				0	0
NA	AA-00601			SA-005054	100614	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Cassette Lot #13518		N/A	N/A					0 0			0 0				0 0				0	0
NA	AA-00602		1/22/2007	SA-005055	100614	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Cassette Lot #13518		N/A	N/A					0 0			0 0				0 0				0	0
NA	AA-00603		1/22/2007	SA-005055	100614	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Cassette Lot #13518		N/A	N/A					0 0			0 0			C	0 0				0	0
NA	AA-00604		1/22/2007	SA-005055	100614	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Cassette Lot #13518		N/A	N/A					0 0			0 0			C	0 0				0	0
NA	AA-00605		1/22/2007	SA-005056	100614	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Cassette Lot #13518		N/A	N/A					0 0			0 0			C	0 0				0	0
NA	AA-00841		3/8/2007	SA-005601	100689	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13843		N/A	N/A					0 0			0 0			C	0 0				0	0
NA	AA-00842		3/8/2007	SA-005601	100689	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13843 Lot #13843		N/A	N/A N/A					0 0			0 0			C	0 0				0	0
NA	AA-00843 AA-00844		3/8/2007	SA-005601 SA-005602	100689	AIF	Stationary	N/A	Lot Blank Lot Blank	AD-000001 AD-000001	Blank	Blank Blank	Lot #13843 Lot #13843		N/A N/A	N/A N/A			1	_	0 0			0 0			- 0	0				0	0
NΔ	AA-00844 AA-00845		0.0.200.	SA-005602 SA-005602	100689	Air	Stationary		Lot Blank Lot Blank	AD-000001 AD-000001	Blank	Blank	Lot #13843 Lot #13843		N/A N/A	N/A N/A			1		0 0		-	0 0				0 0				0	0
NA NA	AA-00846	1	3/8/2007	SA-005602	100689	Air	Stationary		Lot Blank	AD-000001	Blank	Blank	Lot #13843		N/A	N/A			1	-	0 0	1	1	0 0			1	0 0				0	0
NA	AA-00847			SA-005603	100689	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13843		N/A	N/A			1		0 0			0 0			- 0	0 0				0	o o
NA	AA-00848		3/8/2007	SA-005603	100689	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13843		N/A	N/A			1		0 0			0 0				0 0				0	0
NA	AA-00849	İ	3/8/2007	SA-005603	100689	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13843		N/A	N/A					0 0			0 0			C	0 0				0	0
NA	AA-00850		3/8/2007	SA-005604	100689	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13843		N/A	N/A					0 0			0 0			C	0 0				0	0
NA	AA-00851		3/8/2007	SA-005604	100689	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13843		N/A	N/A					0 0			0 0			C	0 0				0	0
NA	AA-00852		3/8/2007	SA-005604	100689	Air	Stationary		Lot Blank	AD-000001	Blank	Blank	Lot #13843		N/A	N/A					0 0			0 0			C	0 0				0	0
NA	AA-00853			SA-005605	100689	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13843 Lot #13843		N/A	N/A			1	_	0 0			0 0			0	0 0				0	0
NA NA	AA-00854	1	3/8/2007	SA-005605 SA-005605	100689	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank Blank	Lot #13843 Lot #13843		N/A	N/A			1		0 0		1	0 0		+	1 0	0 0				0	0
NΔ	AA-00855 AA-00856		3/8/2007	SA-005605 SA-005606	100689	Air	Stationary	N/A	Lot Blank Lot Blank	AD-000001 AD-000001	Blank	Blank	Lot #13483		N/A N/A	N/A N/A			+	-	0 0			0 0				0				0	0
NA NA	AA-00857	1	3/8/2007	SA-005606	100689	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13483	l l'	N/A	N/A			1	-	0 0	1	1	0 0			1	0 0				0	0
NA	AA-00858		3/8/2007	SA-005606	100689	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13483		N/A	N/A			1	+	0 0			0 0				0 0				0	0
NA	AA-00859		0.0.200.	SA-005607	100689	Air	Stationary	N/A	Lot Blank	AD-000001	Blank	Blank	Lot #13483		N/A	N/A			1		0 0			0 0				0 0				0	ő
NA	AA-00860			SA-005607	100689	Air	Stationary		Lot Blank	AD-000001	Blank	Blank	Lot #13483		N/A	N/A					0 0			0 0				0 0				0	0
-			-																														

IndexID values: LIKE \*aa%\*

## Appendix D OU1 Field Blank Data as of February 24, 2008

Appendi	x D -OU1 Field Blank Data as of February 24, 2008						

Note: The	report excludes all Lab OC results	such as those ass	sociated with Lab Blank	cs Lab Duplicates Re-Preparation Re-count S	ame Re-count Different	Verified Ar	alysis etc	

																	ISC	Concentra	tions (Air =	structures/cc)(Du	t = structures/c	m (METHOD -	- ISO 10312)				011	
														Fushidad O		y Amphiboles ( LA ) Structures Detected	_		Facility 1	ided Structures	Chrysotile				Fue!	da d Ct 1	Other Amphiboles ( OA )	
ample ID					Modia Type								-	Excluded Stru	ictures	Structures Detected			Exclu	ided Structures	Structure	es Detected	_	-	Exclud	ded Struct	ures Structures Detected	
ampie io	Task Proj (Loc	operty Group ocation)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=L)/ Area (dust=cm²)	Sample Date	Grid Open ings	Non II	Aspect Length Ratio < 0.5 u 5:1	Dia- meter > 0.5 to 5	h Length 5 Length > 5 u to 10 u 10 u	> Total Conc. LA	Total Count LA	Aspect Ratio < 5:1	Length < Dia- 0.5 u meter > 0.5u	Length Ler 0.5 to 5 u to 1	ngth 5 Length : 10 u 10 u	> Total Conc. C	Total Count C	Aspect L Ratio < < 5:1	Length C	Dia- Length Length 5 Length > meter > 0.5 to 5 u to 10 u 10 u	Total Conc. OA
R-00044	Expo	oort Plant	Lumber Yard		Air	N/A	Stationary	Field Blank	N/A		6/25/2000	10						(	0					0				
R-04434		3 W. Thomas St	Blank	Blank	Dust	N/A	,	Field Blank			4/19/2001	10						(	D					0				
R-06894		3 W. Thomas St	Blank	NA	Air	N/A N/A	Personal	Field Blank			8/4/2001	10						(	0					0				
1R-07104 1R-07183		3 W. Thomas St 3 W. Thomas St	Blank Blank	NA NA	Air Air	N/A N/A	Personal Personal	Field Blank Field Blank			8/4/2001 8/6/2001	10						(	0					0				
1R-07183		3 W. Thomas St	Blank	NA NA	Air	N/A	Personal	Field Blank			8/7/2001	10							0					0				
1-03546		3 W. Thomas St	Blank	NA	Dust	N/A		Field Blank			8/28/2001	10							0					0				
1R-09089		3 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank			9/5/2001	10						(	0					0				
1R-09967		3 W. Thomas St	Blank	NA NA	Air	N/A N/A	Personal	Field Blank			9/6/2001	10						(	0					0				
1R-09972 1R-10026		3 W. Thomas St 3 W. Thomas St	Blank Blank	NA NA	Dust Air	N/A N/A	Personal	Field Blank Field Blank			9/6/2001 9/7/2001	10 10						(	)					0				
1R-10020		3 W. Thomas St	Blank	NA NA	Air	N/A	Personal	Field Blank			9/10/2001	10						- 2	0					0				
1R-10148	303	3 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank			9/11/2001	10							0					0				
1R-10154	303	3 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank			9/11/2001	10						(	0					0				
1R-10165		3 W. Thomas St	Blank	NA .	Air	N/A	Personal	Field Blank			9/12/2001	10						(	)					0				
1R-10168 1R-10094		3 W. Thomas St 3 W. Thomas St	Blank Blank	NA NA	Air Air	N/A N/A	Stationary Personal	Field Blank Field Blank			9/12/2001 9/13/2001	10						(	0					0				
1R-10094 1R-10099		3 W. Thomas St	Blank	NA NA	Air	N/A	Stationary	Field Blank			9/13/2001	10							0					0				
1R-10113		3 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank			9/14/2001	10							0					0				
1R-10116		3 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank			9/14/2001	10						(	D					0				
1-03853		3 W. Thomas St	Blank	NA	Dust	Unknown		Field Blank			9/15/2001	10						(	)					0				
1R-10550 1R-10553		3 W. Thomas St 3 W. Thomas St	Blank Blank	NA NA	Air Air	N/A N/A	Personal Stationary	Field Blank Field Blank			9/17/2001 9/17/2001	10						(	0					0				
1R-10553 1R-10562		3 W. Thomas St	Blank	NA NA	Air	N/A	Personal	Field Blank			9/18/2001	10							1					0				
1R-10565	303	3 W. Thomas St	Blank	NA NA	Air	N/A	Stationary	Field Blank			9/18/2001	10						ì	0					0				
1R-10576	303	3 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		9/19/2001	10						(	D					0				
1R-10662		3 W. Thomas St	Blank	NA NA	Air	N/A	Stationary	Field Blank			9/19/2001	10						(	0					0				
1R-10671 1R-10676		3 W. Thomas St 3 W. Thomas St	Blank Blank	NA NA	Air Air	N/A N/A	Personal	Field Blank Field Blank			9/20/2001 9/20/2001	10						(	0					0				
1R-10676		3 W. Thomas St	Blank	NA NA	Air	N/A	Stationary Personal	Field Blank			9/21/2001	10							1					0				
1R-10690		3 W. Thomas St	Blank	NA NA	Air	N/A	Stationary	Field Blank			9/21/2001	10	_					1	0					0				
1R-10699		3 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		9/22/2001	10						(	D					0				
1R-10724		3 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank			9/22/2001	10						(	0					0				
1R-10733 1R-10740		3 W. Thomas St 3 W. Thomas St	Blank Blank	NA NA	Air Air	N/A N/A	Personal Stationary	Field Blank Field Blank			9/24/2001 9/24/2001	10						(	0					0				
1R-10740 1R-10749		3 W. Thomas St	Blank	NA NA	Air	N/A	Personal	Field Blank			9/25/2001	10							1					0				
1R-10756	303	3 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank			9/25/2001	10							0					0				
1R-11206		3 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank			9/26/2001	10						(	0					0				
1R-11213		3 W. Thomas St 3 W. Thomas St	Blank	NA NA	Air	N/A N/A	Stationary	Field Blank			9/26/2001 9/27/2001	10						(	0					0				
1R-11221 1R-11228		3 W. Thomas St	Blank Blank	NA NA	Air Air	N/A N/A	Personal Stationary	Field Blank Field Blank			9/27/2001	10						(	ויי					0				
1R-11261		3 W. Thomas St	Blank	NA NA	Air	N/A	Personal	Field Blank			9/28/2001	10						- 2	0					0				
1R-11264		3 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank	N/A		9/28/2001	10							0					0				
1R-11278		3 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank			9/29/2001	10						(	0					0				
1R-11280		3 W. Thomas St	Blank	NA NA	Air	N/A	Stationary	Field Blank			9/29/2001	10						(	0	0				0				
1R-11465 1R-11477		3 W. Thomas St 3 W. Thomas St	Blank Blank	NA NA	Air Air	N/A N/A	Stationary Personal	Field Blank Field Blank			9/29/2001	10		C	0		'	) (	)	0			0	3		0		0
1R-11477 1R-11480		3 W. Thomas St	Blank	NA NA	Air	N/A	Stationary	Field Blank			10/1/2001	10	+ +		+ + + -			1	0					0	<del>                                     </del>			
1R-11481	303	3 W. Thomas St	Blank	NA	Air	N/A	Stationary	Field Blank			10/1/2001	10						3	3					0				
1R-11497	303	3 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank	N/A		10/2/2001	10						(	)					0				
1R-11499		3 W. Thomas St 3 W. Thomas St	Blank	NA NA	Air	N/A N/A	Stationary	Field Blank			10/2/2001	10						(	0					0				
1R-11515 1R-11517		3 W. Thomas St	Blank Blank	NA NA	Air Air	N/A N/A	Stationary Personal	Field Blank Field Blank			10/3/2001 10/3/2001	10						-	ה ח					0				
1R-11517 1R-11529		3 W. Thomas St	Blank	NA NA	Air	N/A	Personal	Field Blank			10/3/2001	10			+ + + - +			1	0					0	<del>                                     </del>			
1R-11531	303	3 W. Thomas St	Blank	NA NA	Air	N/A	Stationary	Field Blank			10/4/2001	10							0					0				
1R-11582		3 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank			10/5/2001	10						(	)					0				
1R-11584		3 W. Thomas St	Blank	NA NA	Air	N/A	Stationary	Field Blank			10/5/2001	10						- (	0					0				
1R-11599 1R-11641	303	3 W. Thomas St 3 W. Thomas St	Blank Blank	NA NA	Air Air	N/A N/A	Personal Stationary	Field Blank Field Blank		-	10/8/2001 10/8/2001	10 10					-	1 0	7					0	-			
1R-11641 1R-11654	303	3 W. Thomas St	Blank	NA NA	Air	N/A	Stationary Personal	Field Blank		<del>                                     </del>	10/8/2001	10						'	1					0	-			
1R-11631		3 W. Thomas St	Blank	NA NA	Air	N/A	Stationary	Field Blank			10/10/2001	10						1	ő					0				
1R-11633		3 W. Thomas St	Blank	NA	Air	N/A	Personal	Field Blank			10/10/2001	10			<u>                                     </u>				0					0				
1R-10793		3 W. Thomas St	Blank	NA	Dust	Unknown		Field Blank			10/12/2001	10							0					0				
1R-10867 1R-12721		3 W. Thomas St 3 W. Thomas St	Blank Blank	NA NA	Air Air	N/A N/A	Personal Personal	Field Blank Field Blank			10/22/2001 10/23/2001	10						(	0					0	-			
1R-12/21 1R-12735		3 W. Thomas St	Blank Blank	NA NA	Air	N/A N/A	Personal Personal	Field Blank Field Blank		-	10/23/2001	10						- (	וו					0				
1-04600		3 W. Thomas St	Blank	NA NA	Air	N/A	Stationary	Field Blank		l	11/16/2001	10						1	0					0	-	-		
4.04040	202	2 M/ Thomas Ct	DI D. 7 F	N/A	Λ:-	NI/A	Danaga	Cield Dieels	NI/A		40/40/2004	10			+			+ -						- 0	-			

Appendix D -O	U1 Field Bl	iank Data	as of Febr	ruary 24, 20	800																																
																																.					
ote: The report	excludes all	Lab QC re	sults, such a	as those ass	sociated wi	th Lab Bla	anks, Lab	Duplicates,	Re-Preparati	ion, Re-cour	nt Same, Re-	count Different, Verified Analy	ysis, etc.																								
																								ISO Co	ncentration (	Air=Structure	s/cc)/(Dust	=Structures/cm2) (	Method - ISC	10312)							
																					Libby A	mphibole ( LA )						Chrysotile ( C						Other Amr	phibole ( OA )		
																			Exclud	ed Structures		Structures Detect	d		E	xcluded Stru	tures	Structures I	Detected			Excluder	d Structures	Str	ructures Detec	cted	
				Field Sample										SSN		Pre V	ol (Air=L) Gr	d Filter Statu	s Aspect	Di	ia-				Asp	ect	Dia-					Aspect	Dia-	F T			
Property Group (Location)				Data Sheet	Logbook	Media	Sample					Location Description		(last 4		Post	or Op	n Non	Ratio < L	ength < met	er > Leng	th Length 5 Le	ngth > T		tal Ratio		meter >	Length Length	5 Length	> Total	Total		ngth < meter	r > Length		Length >	Total 0
(Location)	Sample ID	Parent ID	Sample Date	Number	Number	Type	Type	Matrix	Category	Location ID	Sample Group	(Sub Location)	Field Comments	digits) Scenar	io Task	Clear Area	a (Dust=cm²) ing	s Analyzed	5:1	0.5 u 0.5	5u 0.5 to	5 u to 10 u	10 u Co	nc. LA Cour	it LA 5:	1 0.5 u	0.5u	0.5 to 5 u to 10	u 10 u	Conc. C	Count C	5:1	0.5 u 0.5u	u 0.5 to 5	u to 10 u	10 u C	onc. OA
3 W. Thomas St	EP-00008		9/13/2007	PA-002782	100890	Air Po	Personal N	I/A	Field Blank	AD-000151	Blank	EP-Blank	Lot #14710	N/A		N/A	1	1	0	0	0	0 0	0	0	0	0	0 0	0	0	0 0	0	0	0	0	0 0	0	0
3 W. Thomas St	EP-00101		10/30/2007	PA-002916	100951	Air Po	Personal N	l/A	Field Blank	BD-002625	Blank	IN-Blank	Lot #14921	N/A		N/A	1	1	0	0	0	0 0	0	0	0	0	0 0	0	0	0 0	0	0	0	0	0 0	0	0
3 W. Thomas St	EP-00105		10/30/2007	D-002657	100951	Dust	N	I/A	Field Blank	BD-002625	Blank	IN-Blank	Lot #14116	N/A		N/A 0	1	1	0	0	0	0 0	0	0	0	0	0 0	0	0	0 0	0	0	0	0	0 0	0	0
W. Thomas St	EP-00116		10/31/2007	PA-002956	100899	Air Po	Personal N	l/A	Field Blank	BD-002625	Blank	IN-Blank	Lot #14921	N/A		N/A	1	1	0	0	0	0 0	0	0	0	0	0 0	0	0	0 0	0	0	0	0	0 0	0	0
3 W. Thomas St	EP-00163		11/6/2007	PA-002772	100936	Air Po	Personal N	I/A	Field Blank	BD-002625	Blank	IN-Blank	Lot #14921	N/A		N/A	3	1	0	0	0	0 0	0	0	0	0	0 0	0	0	0 0	0	0	0	0	0 0	0	0
2 M/ Thomas Ct	ED 00404		44/0/0007	D 000000					Elald Diagla	DD 00000F		IN Blook	Lot #14141C																	-1 -	1						

Page 3 of 7															Air, Dust (	SO) (3)																		7/29/2009, 4:21 PM
Appendix D -OU	1 Field Bla	nk Data a	s of Febr	uary 24, 20	008																													
Note: The report ex	xcludes all L	ab QC res	ults, such a	s those ass	ociated wit	th Lab B	lanks, Lab Duplic	cates, Re-F	reparation	, Re-count	Same, Re-count Different, Verifie	d Analysis, etc.											ISO Concentra	ation (Air-S	tructures/cc)/(Dust	-Structures	s/cm²) (Meth	nod - ISO 10312)						
																		Exclude	d Structures	Libby Amphil		)			ed Structures	Chrysot	tile (C)		1	Excluded	Structures	Other Amphi Struc	bole ( OA ) tures Detected	
Property Group (Location)	Sample ID	Parent ID	Sample Date	Field Sample Data Sheet Number	Logbook Number	Media Type	Sample Type Matrix	Category	Locatio	n ID Sample	Location Description Group (Sub Location)	Field Comments	SSN (last 4 digits)	Scenario	Pre Post Clear	Vol (Air=L) or Area (Dust=cm²)	Open	Non Ratio < Le Analyzed 5:1	ngth < meter > 0.5 u 0.5u	Length L	ength 5 to 10 u	Length > Total 10 u Conc. LA	Total Count LA	Aspect Ratio < 5:1	Dia- Length < meter > 0.5 u 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > Tot	al Total	Aspect Ratio < Lei	Dia-   gth <   meter   0.5u	> Length 0.5 to 5 u	Length 5 Length > to 10 u	Total Count Conc. OA
101 Iowa Flats Rd	AA-00327		11/18/2006	SA-005085	100674		Stationary N/A			1 Blank	Blank	Event 5; Lot #13093		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-00411		12/11/2006	SA-005131	100679	Air	Stationary N/A	Field Blank	SP-131931	1 Blank	Blank	Event 7; Open-closed & sealed 12-11-06; Lot #13093 Event 19; Exposed on 4/19/07;		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
101 Iowa Flats Rd 101 Iowa Flats Rd	AA-00735 AA-00763		4/19/2007 2/26/2007	SA-005744 SA-005528	100692	Air	Stationary N/A	Field Blank Field Blank	SP-132299 SP-131931		AA-Blank AA-Blank	Lot #13518 Event 14; Exposed on 2/26/07; Lot #13518		N/A	N/A N/A		55 55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-00766			SA-005531	100692	Air	Stationary N/A Stationary N/A	Field Blank	SP-131931		AA-Blank	Event 15; Exposed on 3-9-2007; Lot #13518	;	N/A N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-00769		3/17/2007	SA-005534	100692	Air	Stationary N/A	Field Blank	SP-131931	1 Blank	AA-Blank	Event 16; Exposed on 3-17-07; Lot #13518 Exposed on 3-29-07; Lot		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 C
101 Iowa Flats Rd	AA-00772			SA-005537	100692	Air	Stationary N/A	Field Blank	SP-132299		Blank	#13518 Event 20; Exposed on 4/30/07;		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-00923 AA-00927		4/30/2007 5/11/2007	SA-005696	100692	Air	Stationary N/A Stationary N/A	Field Blank Field Blank	SP-132299 SP-132299		AA-Blank AA-Blank	Lot #13518 Event 21; Exposed on 5-11-07; Lot #13518		N/A	N/A N/A		55 55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-00931		5/22/2007	SA-005702	100692	Air	Stationary N/A	Field Blank	SP-132299		AA-Blank	Event 22; Exposed on 5/22/07; Lot #13518		N/A	N/A		115	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-00935		6/2/2007	SA-005705	100692	Air	Stationary N/A	Field Blank	SP-132299	9 Blank	AA-Blank	Event 23; Exposed on 6/2/07; Lot #13518 Event 24; Exposed on 6-13-07;		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-00939		6/13/2007		100692	Air	Stationary N/A	Field Blank	SP-132299		AA-Blank	Lot #13518 Event 25; Exposed on 6-24-07;		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
101 Iowa Flats Rd 101 Iowa Flats Rd	AA-00943 AA-00947			SA-005711 SA-005714	100783	Air	Stationary N/A Stationary N/A	Field Blank Field Blank	SP-132299		AA-Blank AA-Blank	Lot #13518 Event 26; Exposed on 7-5-07; Lot #13518		N/A N/A	N/A N/A		63 55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-00951			SA-005720	100783	Air	Stationary N/A	Field Blank	SP-132299		AA-Blank	Event #27; Exposed on 7-16-07; Lot #13518	;	N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-00955		7/27/2007	SA-005717	100783	Air	Stationary N/A	Field Blank	SP-132299	9 Blank	AA-Blank	Event 28; Exposed on 7-27-07; Lot #13518 Event 29; exposed 8-8-07; Lot		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-00959			SA-005725	100783	Air	Stationary N/A	Field Blank	SP-132299		AA-Blank	#13518 Event 18; Exposed on 4-9-07.		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
101 Iowa Flats Rd 101 Iowa Flats Rd	AA-00967 AA-01203			SA-005811 SA-005730	100692	Air	Stationary N/A Stationary N/A	Field Blank Field Blank	SP-132299		AA-Blank AA-Blank	Lot #13518 Event 30; Exposed on 8/18/07; Lot #13518		N/A N/A	N/A N/A		55 55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-01209		8/29/2007		100783	Air	Stationary N/A	Field Blank	SP-132299		AA-Blank	Event 31; Exposed on 8-29-07		N/A	N/A		30	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-01213		9/9/2007	SA-005740	100783	Air	Stationary N/A	Field Blank	SP-132299	9 Blank	AA-Blank	Event 32; Exposed on 9-9-07; Lot #14636 Event 33; Exposed on 9-20-07;		N/A	N/A		40	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
101 Iowa Flats Rd	AA-01217			SA-006915	100783	Air	Stationary N/A	Field Blank	SP-132299		AA-Blank	Lot #14636 Event 6; open-closed and sealed	d	N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
101 Ski Rd 101 Ski Rd	AA-00356 AA-00653			SA-005094 SA-005421	100676	Air	Stationary N/A Stationary N/A	Field Blank Field Blank	SP-131922 SP-131922		AA-Blank AA-Blank-TEM	12-2-06; Lot #13093 Event 12; Blank exposed 2/1/07 @ 0743; Lot #12609		N/A	N/A N/A		55 55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0 0
101 Ski Rd	AA-01044			SA-005987	100746	Air	Stationary N/A	Field Blank	SP-131922		AA-Blank	Event 20; Sample exposed 4/30/07; Lot #13843		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
101 Ski Rd	AA-01326		7/5/2007	SA-006638	100815	Air	Stationary N/A	Field Blank	SP-131922	2 Blank	AA-Blank	Event 26; Exposed on 7/5/07; Lot #13409 Event 9; Exposed blank 1-1-07;		N/A	N/A		67	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
119 Evans Rd	AA-00509			SA-005251	100684	Air	Stationary N/A	Field Blank	SP-131933		AA-Blank	Lot #13409 Event 14; Exposed on 2/25/07;		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
119 Evans Rd	AA-01070			SA-005551 SA-006013	100693	Air	Stationary N/A Stationary N/A	Field Blank Field Blank	SP-131933 SP-131933		AA-Blank AA-Blank	Lot #13518 Event 20; Sample exposed 5/2/07; Lot #13843		N/A	N/A N/A		55 55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
119 Evans Rd	AA-01070			SA-006284	100746	Air	Stationary N/A	Field Blank	SP-131933		AA-Blank	Event 23; Exposed on 6/4/07; Lot #13843		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0 0
119 Evans Rd	AA-01575		8/20/2007	SA-007150	100871	Air	Stationary N/A	Field Blank	SP-131933	3 Blank	AA-Blank	Event 30; exposed on 8/20/07; Lot #14635 Event 16; Blank exposed on		N/A	N/A		100	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 C
1427 Highway 37 N 1735 Missoula Ave	AA-00828 AA-00001		3/17/2007 11/10/2006	SA-005621 SA-003771	100698 100656	Air Air	Stationary N/A Stationary N/A	Field Blank Field Blank	SP-128691 SP-131934		AA-Blank Blank	3/17/07; Lot #13518 Lot #13093		N/A N/A	N/A N/A		55 55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0 0
1735 Missoula Ave 1735 Missoula Ave	AA-00005 AA-00013		11/22/2006	SA-003775 SA-003781	100656	Air	Stationary N/A	Field Blank Field Blank	SP-131934 SP-131934		Blank Blank	Event 4; Blank field; Lot #13093 Event 6; Lot #13093		N/A N/A	N/A N/A		55 55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-00017				100636	Air	Stationary N/A Stationary N/A	Field Blank	SP-131934		AA-Blank	Event 7; Blank prepared 1/5/07; Lot #13093		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0 (
1735 Missoula Ave	AA-00021		1/14/2007	SA-005318	100675	Air	Stationary N/A	Field Blank	SP-131934	4 Blank	AA-Blank	Event 8; Blank prepared 1/19/07; Lot #13093 Event #9;Blank prepared 2/2/07;		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 C
1735 Missoula Ave	AA-00025		2/2/2007	SA-005321	100675	Air	Stationary N/A	Field Blank	SP-131934	4 Blank	AA-Blank	Lot #13093 Event 10; Blank prepared		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
1735 Missoula Ave 1735 Missoula Ave	AA-00029 AA-00033		2/16/2007 3/2/2007	SA-005324 SA-005327	100675	Air	Stationary N/A	Field Blank Field Blank	SP-131934 SP-131934		AA-Blank AA-Blank	2/16/07; Lot #13093 Event 11; Blank prepared 3/2/07; Lot #13093		N/A	N/A N/A		55 55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-00037		3/16/2007		100675	Air	Stationary N/A Stationary N/A	Field Blank	SP-131934 SP-131934		AA-Blank	Event 12; Blank prepared 3/16/07; Lot #13093		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0 (
1735 Missoula Ave	AA-00041		3/30/2007	SA-005333	100697	Air	Stationary N/A	Field Blank	SP-131934	4 Blank	AA-Blank	Event 13; Blank prepared 3/30/07; Lot #13093		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-00045		4/13/2007	SA-005336	100697	Air	Stationary N/A	Field Blank	SP-131934	4 Blank	AA-Blank	Event #14; Blank prepared 4/13/07. Lot #13409 Event 15; Blank prepared		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
1735 Missoula Ave 1735 Missoula Ave	AA-00049 AA-00053		4/27/2007 5/6/2007	SA-005339 SA-005946	100697 100697	Air Air	Stationary N/A Stationary N/A	Field Blank Field Blank	SP-131934 SP-131934		AA-Blank Blank	4/27/07; Lot #13409 Event 16; Lot #13409		N/A N/A	N/A N/A		55 55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-00057		5/25/2007	SA-005949	100697	Air	Stationary N/A	Field Blank	SP-131934	4 Blank	AA-Blank	Event #17; Blank prepared 5/25/07; Lot #13409 Event 18; Blank prepared		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-00301		6/8/2007		100697	Air	Stationary N/A	Field Blank	SP-131934		AA-Blank	6/8/07; Lot #13409 Event 19; Blank collected		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-00305 AA-00309			SA-005955 SA-005958	100697	Air	Stationary N/A Stationary N/A	Field Blank Field Blank	SP-131934 SP-131934		AA-Blank AA-Blank	6/22/07; Lot #13409 Event 20; Blank prepared on 7/3/07; Lot #13409		N/A N/A	N/A N/A		55 58	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-00313			SA-005961	100737	Air	Stationary N/A	Field Blank	SP-131934		AA-Blank	Event 21; blank prepared 7/18/07; Lot #13409		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-00317		7/31/2007	SA-005964	100737	Air	Stationary N/A	Field Blank	SP-131934	4 Blank	AA-Blank	Event #22; Blank prepared 7/31/07; Lot #13409 Event #23; Blank prepared on		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-01361		8/17/2007		100737	Air	Stationary N/A	Field Blank	SP-131934		AA-Blank	8/17/07; Lot #13409 Event #24; Blank prepared		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
1735 Missoula Ave 1735 Missoula Ave	AA-01365 AA-01369			SA-005970 SA-005973	100737	Air	Stationary N/A Stationary N/A	Field Blank Field Blank	SP-131934 SP-131934		AA-Blank AA-Blank	8/29/07; Lot #13409 Event #25; Blank prepared 9/12/07; Lot #13409		N/A N/A	N/A N/A		30 84	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-01373		9/26/2007		100737	Air	Stationary N/A	Field Blank	SP-131934		AA-Blank	Event #26; Blank prepared 9/26/07		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 (	0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-01377		10/11/2007	SA-005979	100916	Air	Stationary N/A	Field Blank	SP-131934	4 Blank	AA-Blank	Event #27; Blank prepared 10/11/07; Lot #14635 Event #28; Blank prepared		N/A	N/A		55	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-01381			SA-005982	100916	Air	Stationary N/A	Field Blank	SP-131934		AA-Blank	10/26/07; Lot #14635 Event #29; Blank prepared		N/A	N/A		100	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0	0	0 0	0 0	0 0
1735 Missoula Ave	AA-01385 AA-01389		11/12/2007	SA-007491 SA-007494	100916	Air	Stationary N/A Stationary N/A	Field Blank Field Blank	SP-131934 SP-131934		AA-Blank AA-Blank	11/12/07; Lot #14862 Event #30; Blank prepared 12/3/07; Lot #14862		N/A N/A	N/A N/A		55 38	0	0 0	0 0	0	0	0 0	0	0 0	0	0	0	0 0	0 0	0	0 0	0 0	0 0
								DIGITA	201004	Didl IN	1	,,	1		listo	1		, ,	٠, ٠		U	ŭ	., 0	0	۷ (			٠,	-, (		٠,	., .,	- 0	<u> </u>

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																				-					ibby Amphib	oole ( LA )		ISO Concent	ation (Air=Struc	tures/cc)/(D		es/cm²) (Meth otile ( C )	iod - ISO 103	312)				Other Amphi			
				Field Sar Data Sh	mple											SSN				Vol (Air=L) Gri	id Filter St	tatus Aspect	cluded Strue	Dia-		ures Detected			Excluded S Aspect	Dia	-	uctures Dete			Asr	Excluded St pect	Dia-		tures Detect		Total
Property Group (Location)	Sample ID	Parent ID	Sample Date	Data Sh Numb	eet L	ogbook lumber	Media Type	Sample Type	Matrix	Categor	y Loca	tion ID S	Loc Sample Group	cation Description (Sub Location)	Field Comments	(last 4 digits)	Scenario	Task	Post Clear Are	or Ope ea (Dust=cm²) ing	en Nor is Analy:		Length <	meter > 0.5u	Length Le 0.5 to 5 u to	ength 5 Lengto 10 u 10	th > Total ou Conc. L	Total A Count LA	Ratio < Len 5:1 0.	gth < mete	r > Length u 0.5 to 5	Length 5 to 10 u	Length > 10 u	Total Conc. C Co	Total Rati	io < Lengt	h < meter > u 0.5u	Length 0.5 to 5 u	Length 5 Le to 10 u	ngth > To 10 u Con	otal Count c. OA OA
1735 Missoula Ave	AA-01393		12/24/2007	SA-00749	7 100	1916 Ai	ir :	Stationary	N/A	Field Blank	SP-131	934 B	Blank AA-Blank		Event #31; Blank prepared 12/24/07; Lot #14862		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
1735 Missoula Ave	AA-01397		1/16/2008	SA-00774	3 100	1916 Ai	ir :	Stationary	N/A	Field Blank	SP-131	934 B	Blank AA-Blank		Event #32; Blank prepared 1/16/08; Lot #14862		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
															Event 5; Cassette opened 30																										
1915 Kootenai River Rd	AA-00340		11/18/2006	SA-00508	1 100	1673 Ai	ir		N/A	Field Blank	SP-131	920 B	Blank Blank		seconds, closed & sealed on 11- 18-06; Lot #13093		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0		0	0	0	0 0	0	0	0	0 0
1915 Kootenai River Rd	AA-01013		4/19/2007	SA-00587		717 Δi	ir .	Stationary		Field Blank			Blank AA-Blank		Event 19; Sample exposed on 4/19/07; Lot #13843		N/A		N/A	55			0	0 0	0	0	0	0 0	0	0	0	0 0		0	0	0	0 0	0	0	0	0 0
1915 Kootenai River Rd	AA-01289		6/24/2007	SA-00650		1819 Ai		Stationary		Field Blank			Blank AA-Blank		Event 25; Sample exposed on 06/24/07; Lot #13843		N/A		N/A	10			0	0 0	0	0	0	0 0	0	0	0	0 0		0	0		0 0	0	0	0	0 0
1915 Kootenai River Rd	AA-01609		8/29/2007	SA-00030		1882 Ai				Field Blank			Blank AA-Blank		Event 31; Exposed on 8/29/07; Lot #14635		N/A		N/A	37			0	0 0	0	0	0	0 0	0	0	0	0 0		0	0	0	0 0	0	0	0	0 0
			10/26/2006	SA-007343		1666 Ai		Stationary					Blank AA-Blank		Exposed to air 30 sec. 10-26-06- ngs; Lot #13093	-	N/A			55			0	0 0	0	0	0	0 0	0	0	0	0 0		0	0	0	0 0	0	0	0	0 0
2261 Highway 2 S	AA-00224		2/24/2007				ır ş	Stationary		Field Blank					Event 14; Exposed on 2/24/07; Lot #13518		N/A		N/A	55				0 0	0		0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
2261 Highway 2 S	AA-00745		2/24/2007	SA-00554-	4 100	1693 Ai	ir :	Stationary	N/A	Field Blank	SP-131	929 E	Blank AA-Blank				N/A		N/A	55	D	-	0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
2261 Highway 2 S	AA-00865		3/18/2007	SA-00563	8 100	1698 Ai	ir :	Stationary	N/A	Field Blank	SP-131	929 B	Blank AA-Blank		Event 16; Sample blank exposed on 3/18/07; Lot #13518	1	N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
2261 Highway 2 S	AA-01259		6/14/2007	SA-00646	8 100	1793 Ai	ir :	Stationary	N/A	Field Blank	SP-131	929 B	Blank AA-Blank		Event 24; Exposed on 6/14/07; Lot #13843		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
247 Indian Head Rd	AA-00400		12/8/2006	SA-005111	9 100	1678 Ai	ir :	Stationary	N/A	Field Blank	SP-131	921 B	Blank AA-Blank		Event 7; Exposed 12-8-06 by Jim Sabo; Lot #13093		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
247 Indian Head Rd	AA-00612		2/1/2007	SA-005379	9 100	1687 Ai	ir :	Stationary	N/A	Field Blank	SP-131	921 B	Blank AA-Blank		Event 12; Blank exposed 2-01- 07 at 0942; Lot #13409		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	О	0	0	0	0 0	0	0	0	0 0
247 Indian Head Rd	AA-00696		2/23/2007	SA-00551	7 100	1693 Ai	ir :	Stationary	N/A	Field Blank	SP-131	921 B	Blank AA-Blank		Event 14; Exposed on 2/23/07; Lot #13518		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
247 Indian Head Rd	AA-01101		5/11/2007	SA-00604-	4 100	757 Ai	ir :	Stationary	N/A	Field Blank	SP-131	921 B	Blank AA-Blank		Event 21; Sample exposed on 05/11/07; Lot #13409		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
247 Indian Head Rd	AA-01357		7/16/2007	SA-00679	4 100	1825 Ai	ir :	Stationary I	N/A	Field Blank	SP-131	921 B	Blank AA-Blank		Event 27; Exposed on 7-16-07; Lot #14166		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
3088 Highway 37 N	AA-00254		11/5/2006	SA-00420		1672 Ai	ir :	Stationary		Field Blank			Blank AA-Blank	-	Exposed on 11-5-06; Round 4; Lot #13093		N/A	-	N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
															Event 9; Exposed blank on 12- 30-06 @ 0930 hrs. ea, samples																										
															Submitted w/ those collected from 12/30/06 to 01/04/07; Lot																										
3088 Highway 37 N	AA-00488		12/30/2006	SA-00522	4 100	1684 Ai	ir :	Stationary	N/A	Field Blank	SP-131	925 B	Blank AA-Blank		#13409 Event 17; Blank exposed on		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
3088 Highway 37 N	AA-00889		3/28/2007	SA-00566	9 100	1699 Ai	ir :	Stationary	N/A	Field Blank	SP-131	925 B	Blank AA-Blank		3/28/07; Lot #13518 Event 24; Sample exposed on		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
3088 Highway 37 N	AA-01248		6/13/2007	SA-00645	7 100	793 Ai	ir :	Stationary	N/A	Field Blank	SP-131	925 B	Blank AA-Blank		6/13/07; Lot #13843		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
3088 Highway 37 N	AA-01537		8/18/2007	SA-00713	. 400	1871 Ai		Otationa	NI/A	Field Blank	SP-131	005	Blank AA-Blank		Event 30; Exposed on 8/18/07; Archive blank; Lot #14636		N/A		AL/A	10	•				•																
								Stationary							Event 36; Sample exposed on		N/A		N/A			'																			- 0
3088 Highway 37 N	AA-01797		11/12/2007	ŠA-00722		1939 Ai	ir	Stationary	N/A	Field Blank			Blank AA-Blank		11/12/07; Lot #14636 Event 2 Exposed on 8/3/07; Lot		N/A		N/A	55		-	0	0 0		0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
3501 Haul Rd	AA-01480		8/3/2007	SA-00702		1846 Ai	ir :	Stationary	N/A	Field Blank			Blank AA-Blank		#14166 Event 11; Exposed 1.14.08; Lot		N/A		N/A	55			0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
3501 Haul Rd	AA-01857		1/14/2008	SA-00777	5 100	1939 Ai	ir :	Stationary	N/A	Field Blank	SP-134	340 B	Blank AA-Blank		#14820		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
															Event 7; Pumphouse; open 30 sec-close & seal - 12/9/06.																										
															Sample collected on 12/09/06 for sample set collected from 12-	-																									
378 Cabinet View Rd	AA-00416		12/9/2006	SA-00513	5 100	1678 Ai	ir :	Stationary	N/A	Field Blank	SP-131	927 B	Blank AA - Blank		9 to 12-14-06; Lot #13093		N/A		N/A	55	5	-	0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
378 Cabinet View Rd	AA-00546		1/11/2007	SA-00529	6 100	1685 Ai	ir :	Stationary	N/A	Field Blank	SP-131	927 B	Blank AA-Blank		Event 10; Pumphouse, exposed 1-11-07; Lot #13409		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
															Event 17; Blank exposed on 3/29/07; Maintenance shop; Lot																										
378 Cabinet View Rd	AA-00894		3/29/2007	SA-00567-	4 100	1699 Ai	ir :	Stationary	N/A	Field Blank	SP-131	928 B	Blank AA-Blank		#13518 Event 20; Sample exposed		N/A		N/A	55	5	-	0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
378 Cabinet View Rd	AA-01057		5/1/2007	SA-006000	0 100	1746 Ai	ir :	Stationary	N/A	Field Blank	SP-131	928 B	Blank AA-Blank		5/1/07; Maintenance shop; Lot #13843		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
								·							Event 21 sample exposed on 5/12/07; Maintenance shop; Lot																										
378 Cabinet View Rd	AA-01091		5/12/2007	SA-00605	5 100	1757 Ai	ir :	Stationary	N/A	Field Blank	SP-131	928 B	Blank AA-BLANK		#13409 Event 22; Sample exposed on		N/A		N/A	55	5	-	0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
378 Cabinet View Rd	AA-01134		5/23/2007	SA-00618	5 100	1772 Ai	ir :	Stationary	N/A	Field Blank	SP-131	927 B	Blank AA-Blank		5/23/07. Pumphouse; Lot #13843		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0		0	0	0	0 0	0	0	0	0 0
	70101		0/20/2007	0/100010	0 100	7.0		Cidionaly	1071	I IOIO DIGIIK	0. 101	OL,	Static Co.		Event 30; Pumphouse; exposed		1471		1071		_					-						0									
378 Cabinet View Rd	AA-01564		8/19/2007	SA-00713	9 100	1871 Ai	ir :	Stationary	N/A	Field Blank	SP-131	927 B	Blank AA-Blank		from 8-19-07; Lot #14636 Event 10; Blank exposed 1-12-		N/A		N/A	10	0		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
475 Fish Hatchery Rd	AA-00553		1/12/2007	SA-00530	3 100	1685 Ai	ir :	Stationary	N/A	Field Blank	SP-131	935 B	Blank Blank		07; Lot #13409 Event 17; Sample exposed on		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
475 Fish Hatchery Rd	AA-00911		3/30/2007	SA-00569	1 100	1699 Ai	ir :	Stationary	N/A	Field Blank	SP-131	968 B	Blank AA-Blank		3/30/07; Lot #13518		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
															Event 21 Collected from 5/13/07	-																									
475 Fish Hatchery Rd	AA-01109		5/13/2007	SA-006072	2 100	757 Ai	ir :	Stationary	N/A	Field Blank	SP-131	968 B	Blank AA-Blank		to 5/18/07; Blank exposed on 5/13/07; Lot #13409		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
475 Fish Hatchery Rd	AA-01268		6/15/2007	SA-00647	7 100	793 Ai	ir :	Stationary	N/A	Field Blank	SP-131	968 B	Blank AA-Blank		Event 24; Exposed on 6/15/07; Lot #13843		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
475 Fish Hatchery Rd	AA-01477		7/29/2007	SA-00694	0 100	1838 Ai	ir :	Stationary	N/A	Field Blank	SP-131	968 B	Blank AA-Blank		Event 28; exposed on 7-29-07; Lot #14166		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
475 Fish Hatchery Rd	AA-01627		8/31/2007	SA-00737	5 100	1882 Ai	ir :	Stationary	N/A	Field Blank	SP-131	968 B	Blank AA-Blank		Event 31; Exposed on 8-31-07; Lot #14636		N/A		N/A	30	)		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
															Event 4 (Expansion) Exposed on																										
5002 Highway 37 N	AA-01632	<del>                                     </del>	9/4/2007	SA-00738		1846 Ai	ir :	Stationary		Field Blank			Blank AA-Blank		9-4-07; Lot #14636 Field blank exposed 10/14/06;		N/A		N/A	37		-	0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
501 Mineral Ave	AA-00149		10/14/2006	SA-00491	5 100	1665 Ai	ir :	Stationary	N/A	Field Blank	SP-131	923 B	Blank AA-Blank		Lot #13093 Field blank exposed 10/14/06;		N/A		N/A	10		-	0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
501 Mineral Ave	AA-00150		10/14/2006	SA-00491	6 100	1665 Ai	ir :	Stationary	N/A	Field Blank	SP-131	923 B	Blank AA-Blank-TE	EM	Lot #12609 Event 8-analysed; exposed &		N/A		N/A	10	)	-	0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
501 Mineral Ave	AA-00439		12/18/2006	SA-00515	8 100	1682 Ai	ir :	Stationary	N/A	Field Blank	SP-131	923 B	Blank AA-Blank		sealed @ site 12-18-06, 1619hrs; Lot #13409		N/A		N/A	55	5		0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
501 Mineral Ave	AA-00781		3/6/2007	SA-00556		1696 Ai				Field Blank			Blank AA-Blank		Event 15; Exposed on 3/6/07; Lot #13518		N/A		N/A	55			0	0 0	0	0	0	0 0	0	0	0	0 0	0	0	0	0	0 0	0	0	0	0 0
501 Mineral Ave	AA-01162		6/7/2007	SA-00625		1774 Ai		Stationary		Field Blank			Blank AA-Blank		Event 23; Exposed on 6/7/07; Lot #12609		N/A		N/A	55			0	0 0	0	0	0	0 0	0	0	0	0 0	0	n	0	0	0 0	0	0	0	0 0
501 Mineral Ave	AA-01239		6/13/2007	SA-00644		7793 Ai		Stationary		Field Blank			Blank AA-Blank		Event 24; Blank exposed on 6/13/07; Lot #12609		N/A		N/A	55			0	0 0	n	0	0	0 0	0	0	0	0 0		0	0	0	0 0	0	n	0	0 0
501 Mineral Ave	AA-01239		10/1/2007	SA-00710		1900 Ai		Stationary		Field Blank			Blank AA-Blank		Event 34; Sample exposed on 10/1/07; Lot #14820		N/A		N/A	55			0	0 0	^	0	0	0 ^	0	0	0	0 0		0	0	0	0 0	0	0	0	0 0
60 Port Blvd	AA-00800		3/7/2007	SA-00710		1696 Ai			N/A	Field Blank					Event 15; exposed on 3/7/07; Lot #13518		N/A		N/A	55			0	0	,	0	0	0 -		0	0	0		0	0	0	0 0	0	0		0 0
60 Port Blvd			3/7/2007 4/20/2007	SA-00558		1696 Ai		Stationary	N/A						Event 19; Blank exposed on 4/20/07; Lot #13843		N/A			55			0	0 0		0	0	0 -	0	0	0	0	0	0	U	0	0 0	0	0	0	0 0
60 Port Blvd	AA-01026						ır Ş		N/A	Field Blank			Blank AA-Blank  Blank AA-Blank		4/20/07; Lot #13843 Event 29; Sample exposed on 8/8 /07: Lot #14166		N/A		N/A	55			0	0		0	U	0 0	0	0	0	0	0	0	0	U	0 0	0	0	0	0 0
60 POR BIVO	AA-01513		8/8/2007	SA-00705	5 100	1854 Ai	ır	Stationary	n/A	Field Blank	SP-131	926 B	SIANK IAA-BIANK				IN/A		N/A	55	•		U	0	0	0	U	0 0	0	U	U	0 0	0	0	U	U	U 0	0	0	0	0 0
899 Farm to Market Rd	AA-00113		10/5/2006	SA-00476	6 100	661, 1006 Ai	ir :	Stationary	N/A	Field Blank	SP-131	932 B	Blank AA-Blank		Exposed 10-5-06; Lot #13093; Sampling date: 10/5/06-10/10/06	6	N/A		N/A	10	,		0	0 0	0	0	0	0 0	0	0	0	0		0	0	0	0 0	0	0	0	0 0

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																										ISO Co	ncentration	(Air=Stru	ctures/cc)/	(Dust=Stru	uctures/cm	<sup>2</sup> ) (Method - I	SO 10312)							
																						Lib	by Amphib	ole (LA)						С	Chrysotile (	C)					Other An	nphibole ( O	۹)	
																					ded Structu	es	Structu	res Detected				Excluded	Structures		Structure	es Detected			Excluded	Structures	S	ructures De	tected	
Property Group			Field Sam Data She			a Sample					Location Description		SSN (last 4			Pre	Vol (Air=L)		Filter Status		Length <	Dia-					Asp	ect	ngth < me	oia-			. T-1-1	Total	Aspect Ratio < Le	Dia nath < mete	a- er > Lengt		5 Length >	Total Cou
(Location)	Sample ID	Parent ID Sample Da						Category	v Loca	tion ID Sample Gro		Field Comments	digits)	Scenario	Task		Area (Dust=cm²	Open	Non	5:1	0.5 u	0.50	5 to 5 II to	ngth 5 Lengt 10 u 10	II Conc	I A Cou	nt LA 5:	1 0	511 0	5u 0.5	to 5 II to	gth 5 Lengt 10 u 10	II > Total	Count C	5:1	0.5 u 0.5				Conc. OA OA
(======					.,,,,,	.,,,,,	muu ix		,		(0.0.2000.00)	Exposed; Sampling date: 10-27		Cocinano			raca (Daot-om	,5-	Analyzou																					
899 Farm to Market Rd	AA-00233	10/27/2006	SA-005041	100666,	1006 Air	Stationary	N/A	Field Blank	SP-131	1932 Blank	AA-Blank	to 11-1-06; Lot #13093		N/A		N/A		55		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0 0	0
												Event 11; Exposed 1-28-07;																												
												Samples collected 1-23-07 to 1-	-																											
899 Farm to Market Rd	AA-00586	1/28/2007	SA-005361	100686	Air	Stationary	N/A	Field Blank	SP-131	1932 Blank	AA-Blank	28-07; Lot #13409		N/A		N/A		55		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0 0	0
												Event 13; Blank exposed on																												
899 Farm to Market Rd	AA-00718	2/14/2007	SA-005491	100688	Air	Stationary	N/A	Field Blank	SP-131	1932 Blank	AA-Blank	2/14/07; Lot #13518		N/A		N/A		55		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0 0	0
899 Farm to Market Rd	A A-00719	2/14/2007	SA-005492	100688					SP-131		AA-Blank	Event 13; Blank exposed on 2/14/07: Lot #12609				N/A																								
899 Farm to Market Rd	AA-00/19	2/14/2007	SA-005492	100688	Air	Stationary	N/A	Field Blank	SP-131	1932 Blank	AA-Blank	Event 16: Sample exposed on		N/A		N/A		55		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0 0	
899 Farm to Market Rd	A A - 00868	3/19/2007	SA-005641	100698	Air	Stationary	NI/A	Field Blank	SP-131	1932 Blank	AA-Blank	3/19/07: Lot #13518		NI/A		N/A				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0
COOT CHIN TO MICH COTTO	AA-00000	3/13/2007	5A-003041	100030	All	Otationary	110/7	I leid Dialik	01-101	I SUZ DIBIIK	7 O'L DIGITA	Event 18; Blank exposed on		14/5		INA		33		0		- 0			- 0	U	U	Ü	-	-		0	0	0 0	-	- 0	U	U	0 0	
899 Farm to Market Rd	AA-00987	4/10/2007	SA-005798	100711	Air	Stationary	N/A	Field Blank	SP-131	1932 Blank	AA-Blank	4/10/07. Lot #13518		N/A		N/A		55		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0 0	0
												Event 22; Sample exposed on																												
899 Farm to Market Rd	AA-01143	5/24/2007	SA-006194	100772	Air	Stationary	N/A	Field Blank	SP-131	1932 Blank	AA-Blank	5/24/07.		N/A		N/A		55		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0 0	0
Corner of Snowshoe Dr &												Event 23; Exposed on 6/3/07;																												
Woodland Heights Rd	AA-01185	6/3/2007	SA-006275	100774	Air	Stationary	N/A	Field Blank	SP-131	1930 Blank	AA-Blank	Lot #13843		N/A		N/A		55		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0 0	0
Fisher River Bridge Milepo	AA-01882	12/24/2007	SA-007736	100939	Ale	Stationary		Field Blank	SP-135	-040 DII-	AA-Blank	Event 38/10; Sample exposed on 12-24-07; Lot #14820		N/A		N/A																				0				
0.25	AA-01882	12/24/2007	SA-007736	100939	Air	Stationary	N/A	Field Blank	SP-135	5040 Blank	AA-Blank	Event 18: Blank exposed on		N/A		N/A		55		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0 0	- 0
J. Neils Park	ΔΔ-00994	4/8/2007	SA-005778	100711	Δir	Stationary	N/A	Field Blank	SP-132	2298 Blank	AA-Blank	4/8/07: I of #13518		N/A		N/A		55		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0
	701 00004	4/0/2007	5,,005/70	130711	r di	Citationally	14/1	1 IOIO DIBIIK	31 - 132	Didirk	V	Event 23: exposed on 6/2/07:		1471		1071		33				U		- V	-		-	J	3	Ü	٠		-	0	0	,	-	-	0	
J. Neils Park	AA-01165	6/2/2007	SA-006255	100774	Air	Stationary	N/A	Field Blank	SP-132	2298 Blank	AA-Blank	Lot #13843		N/A		N/A		55		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0 0	0
												Event 35; Sample exposed on																												
I Noile Dork	4.4.045.40	40/00/0007	0.4.007045	100000	A I -	01-11-1-1		Cirly Direct	OD 400	none Dissi	A A Blook	10/22/07: Let #14920	1	la.co		ALCA.												_												

#### Appendix D -OU1 Field Blank Data as of February 24, 2008

Note: Th	renort excludes all Lab OC resu	ilts, such as those asso	ociated with Lah Rla	anks, Lab Duplicates, Re-Preparation, Re-c	Count Same	Re-count Di	fferent Verif	ied Analysis etc		1			1	<del></del>				1 1								++-
Note. III	report excludes an Lab QC resu	its, such as those asso	Defaced with Lab Bia	iliks, Lao Duplicates, Re-1 reparation, Re-c	Jount Same	, RC-count Di	incicint, verin	led Analysis, etc											AHERA / ASTM 57	55						
											PCM (METHOD - NIOSH 7400)															
										-	NIOSH 7400)			Libby A	Amphiboles ( LA	A )	1	Chrysotile ( C	)		Other Amph	iboles ( OA )	)	Total	al Asbestos	s
Sample ID	Task	Property Group	Sample Group	Location Description (Sub Location)	Media	Matrix	Sample Type	Category	Pre Vol (air=L)	Sample Date	Fibers/CC	Filter Status	S<5u		Analytical	Asb conc	S<5u	S>5u Analytical	Asb conc	S<5u			sb conc (Air = Asbe		iu S>5u	
		(Location)			Туре				Post Area Clear (dust=cm <sup>2</sup> )			Non Analyzed			Sensitivity (Air = S/cc) or	(Air = S/cc) or	)	Sensitivity (Air = S/cc) or	(Air = S/cc) or	'		sitivity S/cc) or ([	S/cc) or Ty  Dust = S/cm <sup>2</sup> ) Ident			= S/cc) or (Dust = S/cm <sup>2</sup> )
									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					1)	(Dust = S/cm <sup>2</sup> )	(Dust =		(Dust = S/cm <sup>2</sup>			(Dust	= S/cm <sup>2</sup> )	,			
1R-04564		303 W. Thomas St	Planer Building N	۸	Air	N/A	Personal	Field Blank	N/A	5/9/2001						S/cm <sup>2</sup> )			S/cm <sup>2</sup> )				UNK		0 0	
1R-04504		303 W. Thomas St	Planer Building N	A	Air	N/A	Stationary	Field Blank	N/A	5/10/2001													UNK		0 /	0
1R-04609 1R-04632		303 W. Thomas St 303 W. Thomas St	Planer Building Na Planer Building Na	Α	Air Air	N/A N/A	Personal Personal	Field Blank Field Blank	N/A N/A	5/14/2001 5/16/2001													UNK		0 (	0
1R-04632		303 W. Thomas St	Planer Building N	A	Air	N/A	Stationary	Field Blank	N/A	6/7/2001													UNK		0 7	0
1R-06894	Hepa vacuum	303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	Α	Air Air	N/A N/A	Personal Personal	Field Blank Field Blank	N/A N/A	8/4/2001 8/4/2001													UNK		0 0	0 < 0.00622
1R-07183	nopa vacuum	303 W. Thomas St	Blank N	A	Air	N/A	Personal	Field Blank	N/A	8/6/2001			0	0			0	0		0	0		ONK		0 (	0 0.00022
1R-07383 1R-10026		303 W. Thomas St 303 W. Thomas St	Blank N	A	Air Air	N/A N/A	Personal Personal	Field Blank Field Blank	N/A N/A	8/7/2001 9/7/2001			0	0			0	0		0	0		UNK		0 0	0
1R-10020		303 W. Thomas St	Blank N	Α	Air	N/A	Personal	Field Blank	N/A	9/10/2001													UNK		0 /	0
1R-10148 1R-10149		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A	Air Air	N/A N/A	Personal Stationary	Field Blank Field Blank	N/A N/A	9/11/2001 9/11/2001	0												UNK		0 (	0 < 0
1R-10154		303 W. Thomas St	Blank N	Α	Air	N/A	Stationary	Field Blank	N/A	9/11/2001	Ü												UNK		0 /	0
1R-10165		303 W. Thomas St	Blank N	A	Air	N/A	Personal	Field Blank	N/A	9/12/2001													LINIZ		0 0	0
1R-10168 1R-10094		303 W. Thomas St 303 W. Thomas St	Blank N. Blank N.	A	Air Air	N/A N/A	Stationary Personal	Field Blank Field Blank	N/A N/A	9/12/2001 9/13/2001	0												UNK		0	0
1R-10095		303 W. Thomas St	Blank N	A	Air	N/A	Stationary	Field Blank	N/A	9/13/2001	0												LINIZ			
1R-10099 1R-10116		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A A	Air Air	N/A N/A	Stationary Stationary	Field Blank Field Blank	N/A N/A	9/13/2001 9/14/2001													UNK		0	0
1R-10553		303 W. Thomas St	Blank N	A	Air	N/A	Stationary	Field Blank	N/A	9/17/2001													UNK		0 (	0
1R-10565 1R-10662		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A A	Air Air	N/A N/A	Stationary Stationary	Field Blank Field Blank	N/A N/A	9/18/2001 9/19/2001													UNK		0 (	0
1R-10676		303 W. Thomas St	Blank N	A	Air	N/A	Stationary	Field Blank	N/A	9/20/2001													UNK		0 (	0
1R-10690 1R-10724		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A A	Air Air	N/A N/A	Stationary Stationary	Field Blank Field Blank	N/A N/A	9/21/2001 9/22/2001													UNK		0 0	0
1R-10740		303 W. Thomas St	Blank N	A	Air	N/A	Stationary	Field Blank	N/A	9/24/2001													UNK		0 0	0
1R-10756 1R-11213		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A A	Air Air	N/A N/A	Stationary Stationary	Field Blank Field Blank	N/A N/A	9/25/2001 9/26/2001													UNK		0 0	0
1R-11228		303 W. Thomas St	Blank N	A	Air	N/A	Stationary	Field Blank	N/A	9/27/2001													UNK		0 0	0
1R-11264 1R-11280		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A	Air Air	N/A N/A	Stationary Stationary	Field Blank Field Blank	N/A N/A	9/28/2001 9/29/2001													UNK		0 0	0
1R-11480		303 W. Thomas St	Blank N.	A	Air	N/A	Stationary	Field Blank	N/A	10/1/2001													UNK		0 (	0
1R-11499 1R-11515		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A A	Air Air	N/A N/A	Stationary Stationary	Field Blank Field Blank	N/A N/A	10/2/2001 10/3/2001													UNK		0 0	0
1R-11531		303 W. Thomas St	Blank N	A	Air	N/A	Stationary	Field Blank	N/A	10/4/2001													UNK		0 (	0
1R-11584 1R-11641		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A A	Air Air	N/A N/A	Stationary Stationary	Field Blank Field Blank	N/A N/A	10/5/2001 10/8/2001													UNK		0 0	0
1R-11656		303 W. Thomas St	Blank N	A	Air	N/A	Stationary	Field Blank	N/A	10/9/2001													UNK		0 (	0
1R-11631 1R-10800		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A A	Air Air	N/A N/A	Stationary Personal	Field Blank Field Blank	N/A N/A	10/10/2001 10/12/2001													UNK		0 0	0
1R-08939		303 W. Thomas St	Blank N	A	Air	N/A	Personal	Field Blank	N/A	10/17/2001													UNK		0 (	0
1R-10828 1R-12253		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A	Air Air	N/A N/A	Personal Personal	Field Blank Field Blank	N/A N/A	10/17/2001 10/18/2001													UNK		0 0	0
1R-10842		303 W. Thomas St	Blank N	A	Air	N/A	Stationary	Field Blank	N/A	10/19/2001													UNK		0 (	0
1R-10851 1R-10870		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A	Air Air	N/A N/A	Personal Stationary	Field Blank Field Blank	N/A N/A	10/20/2001 10/23/2001										+			UNK		0 0	0
1R-12724		303 W. Thomas St	Blank N	A	Air	N/A	Stationary	Field Blank	N/A	10/24/2001													UNK		0	0
1R-12757 1R-12298		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A	Air Air	N/A N/A	Personal Stationary	Field Blank Field Blank	N/A N/A	10/25/2001 11/1/2001										+			UNK		0 0	0
1R-12762		303 W. Thomas St	Blank N	A	Air	N/A	Stationary	Field Blank	N/A	11/2/2001													UNK		0 0	0
1R-12773 1R-13386		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A	Air Air	N/A N/A	Personal Personal	Field Blank Field Blank	N/A N/A	11/3/2001 11/4/2001				<del>                                     </del>									UNK		0 0	0
1-04470		303 W. Thomas St	Blank N	Α	Air	N/A	Stationary	Field Blank	N/A	11/8/2001													UNK		0	0
1-04466 1-04487		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A	Air Air	N/A N/A	Stationary Stationary	Field Blank Field Blank	N/A N/A	11/9/2001 11/12/2001													UNK		0 0	0
1-04581		303 W. Thomas St	Blank N	Α	Air	N/A	Stationary	Field Blank	N/A	11/14/2001													UNK		0	ō
1R-13668 1-04591		303 W. Thomas St 303 W. Thomas St	Blank Na Blank Na	A A	Air Air	N/A N/A	Personal Stationary	Field Blank Field Blank	N/A N/A	11/14/2001 11/15/2001													UNK		0 0	0
1-04600		303 W. Thomas St	Blank N	A	Air	N/A	Stationary	Field Blank	N/A	11/16/2001													UNK		0 0	0
1-03599 1-04089		303 W. Thomas St 303 W. Thomas St	Planer Building Na Planer Building Na		Air Air	N/A N/A	Stationary Personal	Field Blank Field Blank	N/A N/A	12/5/2001 12/7/2001													UNK		0 0	0
1-04089		303 W. Thomas St	Planer Building Na		Air	N/A N/A	Personal	Field Blank	N/A N/A	12/1/2001													UNK		0	0
1R-38177 1R-38191		303 W. Thomas St 303 W. Thomas St		lank lank	Air	N/A	Stationary	Field Blank	N/A N/A	8/30/2006 8/31/2006			0	-			0	0		0	0				0 0	0
1R-38191 1R-23477		Riverside Park	Blank N		Air Air	N/A N/A	Stationary Stationary	Field Blank Field Blank	N/A N/A	10/10/2003			0	-			0	0		0	0				0 0	0
1R-23485		Riverside Park Riverside Park	Blank N. Blank N.	Α	Air	N/A N/A	Stationary	Field Blank	N/A	10/13/2003			0	-			0	0		0	0				0 0	0
1R-23670 1R-23816		Riverside Park Riverside Park	Blank N	A A	Air Air	N/A N/A	Stationary Stationary	Field Blank Field Blank	N/A N/A	10/16/2003 10/23/2003			0				0	0		0	0				0 0	0 0
1R-24117		Riverside Park	Blank N	A	Air	N/A	Stationary	Field Blank	N/A	10/30/2003			0	0			0	0		0	0				0 0	0

Server-Database: \\204.47.48.36\Libby2 IndexID values: LIKE "1r-%"

Appendix D -OU	1 Field Bla	ank Data	as of Febr	uary 24, 20	08																											
Note: The report ex	xcludes all	Lab QC res	sults, such a	s those ass	ociated w	ith Lab E	Blanks, La	b Duplica	tes, Re-Pre	paration, Re	e-count Sar	me, Re-count Differen	t, Verified Analysis,	etc.																		
																										AHERA / ASTM 57	55					
																			PCM (METHOD -													
																			NIOSH 7400)			Libby Amphiboles ( LA )	)		Chrysotile ( C )			Other Amphiboles ( OA	)		Total Asbe	tos
				Field Sample										SSN			Pre	Vol (Air=L)		Filter Status			Asb conc (Air =		Analytical Sensitivity	y Asb conc (Air =		Analytical Sensitivity	Asb conc (Air =			Asb conc (Air
Property Group (Location)				Data Sheet	Logbook	Media					Sample	Location Description		(last 4			Post	or		Non		(Air = S/cc) or (Dust =	S/cc) or		(Air = S/cc) or (Dust	S/cc) or		(Air = S/cc) or (Dust =	S/cc) or	Asbestos Type		S/cc) or
(Location)	Sample ID	Parent ID	Sample Date	Number	Number	Type	Sample Type	Matrix	Category	Location ID	Group	(Sub Location)	Field Comments	digits)	Scenario	Task	Clear	Area (Dust=cm²)	Fibers/cc	Analyzed	S<5u S	S>5u S/cm <sup>2</sup> )	(Dust = S/cm <sup>2</sup> )	S<5u S:	5u = S/cm <sup>2</sup> )	(Dust = S/cm <sup>2</sup> )	S<5u S>	iu S/cm²)	(Dust = S/cm <sup>2</sup> )	Identified	S<5u S	5u (Dust = S/cm <sup>2</sup>
303 W. Thomas St	EP-00008		9/13/2007	PA-002782		Δir	Personal	N/A	Field Blank	AD-000151	Blank	EP-Blank	Lot #14710		N/A																	

## Appendix E Ambient Air Co-located Sample Results as of February 18, 2008

Appendix E -Am	bient Air Co-lo	cated Sample Restuls as	of Febru	ary 18, 2008																														
Note: The report e	xcludes all Lab C	QC results, such as those ass	sociated wit	th Lab Blanks,	Lab Dupli	licates, Re-Prep	aration, Re-	count Same	, Re-count Different, Verified	Analysis, etc.												150.5		Nin Characteria	/a-a\//Doort C	tructures/cm²) (l	Markad ICO	40242)						
																		Excluded Stru		Amphibole (		ISO Con		xcluded Struct		Chrysotile ( C )		10312)		voluded Strue	Other Am	phibole ( OA )		
Property Group		Field Sample Data Sheet	Logbook Number	Media Sam	nple				Location Description		SSN (last 4			ost	(Air=L) Gr	rid Filter St en Non gs Analyz	atus Aspec Ratio ed 5:1	ct	Dia-			Total Total	Aspe	ct	Dia-			Total To	Aspe	ct	Dia- meter > Length 0.5u 0.5 to 5			Total Count
(Location)	Sample ID Pa	rent ID Sample Date Number	Number	Type Typ	pe Matri	rix Category	Location ID	Sample Group	(Sub Location)	Field Comments  Event 12; Sample collected 2/1/07 to 2/6/07; Co-located	digits)	Scenario	Task C	lear Area (D	Dust=cm²) in	gs Analyz	ed 5:1	0.5 u	0.5u 0.5 to	5 u to 10	u 10 u	Conc. LA Count	LA 5:1	0.5 u	0.5u 0	.5 to 5 u to 10	u 10 u	Conc. C Cou	ınt C 5:1	0.5 u	0.5u 0.5 to 5	u to 10 u 1	) u Conc. OA	N OA
101 Ski Rd	AA-00636	2/1/2007 SA-005423	100687	Air Station	nary Outdoo	or Field Sample	SP-131922	Property	AA-CO-HV-05	w/sample AA-00606; Lot #12609		N/A	N/A	A 14225	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0
101 Ski Rd	AA-00647	2/1/2007 SA-005414	100687	Air Station	nary Outdoo	or Field Sample	SP-131922	Property	AA-HV-05	Event 12; Sample collected 2/1/07 to 2/6/07; Lot #13409 Event 12; Sample collected		N/A	N/A	A 14225	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 ,	0 0
101 Ski Rd	AA-00649	2/1/2007 SA-005416	100687	Air Station	nary Outdoo	or Field Sample	SP-131922	Property	AA-HV-05-TEM	2/1/07 to 2/6/07; Lot #12609		N/A	N/A	A 14225	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 (	) 0
101 Ski Rd	AA-00650	2/1/2007 SA-005417	100687	Air Station	nary Outdoo	or Field Sample	SP-131922	Property	AA-CO-HV-05-TEM	Event 12; Sample collected 2/1/07 to 2/6/07; Lot #12609.		N/A	N/A	A 14225	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0	0 0
										Event 26; Collected from 7/5/07 to 7/10/07. Co-located with AA-	7																							
101 Ski Rd	AA-01312	7/5/2007 SA-006624	100815	Air Station	nary Outdoo	or Field Sample	SP-131922	Property	AA-HV-05	01314; Lot #13409		N/A	N/A	A 14449	6	7		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 (	) 0
101 Ski Rd	AA-01314	7/5/2007 SA-006626	100815	Air Station	nary Outdoo	or Field Sample	SP-131922	Property	AA-CO-HV-05	Event 26; Collected from 7/5/07 to 7/10/07. Co-located with AA- 01312; Lot #13409		N/A	N/A	A 14449	6	7		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0.0001	2	0 (	0	0 0	0	0 0
119 Evans Rd	AA-00165	10/16/2006 SA-004932	100663	Air Station	nary Outdoo	or Field Sample	SP-131933	Property	AA-HV-06	Collected on 10-16-06 to 10-21- 06 Lot #13093		N/A	N/A	A 14147	5	8		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0	0 0
119 Evans Rd	AA-00167	10/16/2006 SA-004934	100663	Air Station	nary Outdoo	or Field Sample	SP-131933	Property	AA-HV-06-TEM	Collected on 10-16-06 to 10-21- 06 Lot #12609 Collected on 10-16-06 to 10-21-		N/A	N/A	A 14147	5	8		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 (	0 0
119 Evans Rd	AA-00170	10/16/2006 SA-004937	100663	Air Station	,		SP-131933	Property	AA-CO-HV-06	06 Lot #13093 Collected on 10-16-06 to 10-21-		N/A	N/A		5	-		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 0	) 0
119 Evans Rd	AA-00171	10/16/2006 SA-004938	100663	Air Station	nary Outdoo	or Field Sample	SP-131933	Property	AA-CO-HV-06-TEM	06 Lot #12609 Event 21; Co-located w/AA-		N/A	N/A	A 14164	5	я		0	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0	0 0	0
119 Evans Rd	AA-01103	5/13/2007 SA-006066	100757	Air Station	nary Outdoo	or Field Sample	SP-131933	Property	AA-HV-05	01105. Collected from 5/13/07 to 5/18/07; Lot #13409		N/A	N/A	A 14312	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0	0 0
										Event 21; Co-located with AA- 01103. Collected from 5/13/07																								
119 Evans Rd	AA-01105	5/13/2007 SA-006068	100757	Air Station	nary Outdoo	or Field Sample	SP-131933	Property	AA-CO-HV-05	to 5/18/07; Lot #13409		N/A	N/A	A 14312	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 (	) 0
1427 Highway 37 N	AA-00524	1/10/2007 SA-005270	100685	Air Station	nary Outdoo	or Field Sample	SP-128691	Property	AA-HV-06	Event 10; Sample collected 1- 10-07 to 1-15-07; Lot #13409		N/A	N/A	A 14374	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 ,	o 0
1427 Highway 37 N	AA-00526	1/10/2007 SA-005272	100685	Air Station	nary Outdoo	or Field Sample	SP-128691	Property	AA-CO-HV-06	Event 10; Sample collected 1- 10-07 to 1-15-07; Lot #13409		N/A	N/A	A 14409	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0
1915 Kootenai River Rd	AA 00445	42/47/2000 CA 005402	400000	Air Cratical		Field Comple	CD 404000	Dt-	AA-HV-06	Event 8; Sample collected from 12/17 to 12/22/06; Lot #13409		N1/A	NU	14188	5	-		0	0 0	0									0			0		
		12/17/2006 SA-005163	100682	Air Station	nary Outdoo	or Field Sample	SP-131920			Event 8; Sample collected from		N/A	N/A	14188	5	5		0	0 0	0	0 0	0	0	0 0	0	U	0 0	0	0	0 (	0	0 0	0 0	, 0
1915 Kootenai River Rd	AA-00459	12/17/2006 SA-005177	100682	Air Station	nary Outdoo	oor Field Sample	SP-131920	Property	AA-CO-HV-06	12/17 to 12/22/06; Lot #13409 Event 31; Co-located w/AA-		N/A	N/A	A 14188	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 (	) 0
1915 Kootenai River Rd	AA-01605	8/29/2007 SA-007341	100882	Air Station	nary Outdoo	or Field Sample	SP-131920	Property	AA-HV-05	01607; Collected from 8-29-07 to 9-3-07; Lot #14635 Event 31; Co-located w/AA-		N/A	N/A	A 14270	6	6		0	0 0	0	0 0	0.0001	3	0 0	0	0	0 0	0	1	0 (	0	0 0	0 (	0 0
1915 Kootenai River Rd	AA-01607	8/29/2007 SA-007343	100882	Air Station	nary Outdoo	or Field Sample	SP-131920	Property	AA-CO-HV-05	01605; Collected from 8-29-07 to 9-3-07; Lot #14635		N/A	N/A	A 14270	6	5		0	0 0.0002	0	0 0	0.0002	5	0 0	0	0	0 0	0	0	0 (	0	0 0	0	0 0
2261 Highway 2 S	AA-00377	11/28/2006 SA-004611	100676	Air Station	nary Outdoo	or Field Sample	SP-131929	Property	AA-HV-06	Event 6; Samples collected from 11/28/06 to 12/3/06; Lot #13093		N/A	N/A	A 14387	5	5		0	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0	0 0
										Event 6; Samples collected from 11/28 to 12/3/06; Lot																								
2261 Highway 2 S	AA-00379	11/28/2006 SA-004613	100676	Air Station	nary Outdoo	or Field Sample	SP-131929	Property	AA-CO-HV-06	#13093 Event 18; Sample collected from 4/9/07 to 4/14/07. Co-		N/A	N/A	A 14230	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 0	0	0 0	0 0	, 0
2261 Highway 2 S	AA-00978	4/9/2007 SA-005789	100711	Air Station	nary Outdoo	or Field Sample	SP-131929	Property	AA-HV-05	located w/AA-00980. Lot #13518		N/A	N/A	A 14629	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0	0 0
										Event 18; Collected from 4/9/07 to 4/14/07. Co-located with AA-																								
2261 Highway 2 S	AA-00980	4/9/2007 SA-005791	100711	Air Station	nary Outdoo	or Field Sample	SP-131929	Property	AA-CO-HV-05	00978. Lot #13518		N/A	N/A	A 14629	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 0	) 0
247 Indian Head Rd	AA-00692	2/23/2007 SA-005513	100693	Air Station	nary Outdoo	or Field Sample	SP-131921	Property	AA-HV-05	Event 14; Collected from 2/23/07 to 2/28/07. Co-located with AA-00694; Lot #13518		N/A	N/A	A 14318	5	5		0	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0	0 0
	74.00052	223,2331	100000	7 til Ottation	outdoo	or Frau campio	01 101021	Торолу		Event 14; Collected from			147	11010							0 0						0 0							
247 Indian Head Rd	AA-00694	2/23/2007 SA-005515	100693	Air Station	nary Outdoo	or Field Sample	SP-131921	Property	AA-CO-HV-05	2/23/07 to 2/28/07. Co-located with AA-00692; Lot #13518		N/A	N/A	A 14246	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 '	o 0
247 Indian Head Rd	AA-01353	7/16/2007 SA-006790	100825	Air Station	nary Outdoo	or Field Sample	SP-131921	Property	AA-HV-05	Event 27; Collected from 7-16- 07 to 7-21-07; Lot #14166		N/A	N/A	A 14702	5	5		0	0 0	0	0 0	0	1	0 0	0	0	0 0	0	0	0 (	0	0 0	0	0 0
247 Indian Head Rd	AA-01355	7/16/2007 SA-006792	100825	Air Station	nary Outdoo	or Field Sample	SP-131921	Property	AA-CO-HV-05	Event 27; Collected from 7-16- 07 to 7-21-07; Lot #14166		N/A	N/A	A 14639		5		0	0 0	0	0	0		0 0		0	0 0		0	0	0	0 0	0	ا ا
										Event 9; Samples collected from 12/30/06 to 1/4/07; Lot											-		1	-										
3088 Highway 37 N	AA-00480	12/30/2006 SA-005220	100684	Air Station	nary Outdoo	or Field Sample	SP-131925	Property	AA-HV-06	#13409 Event 9; Samples collected from 12/30/06 to 1/4/07; Lot		N/A	N/A	A 14394	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0 0	0	0 (	0	0 0	0 (	0
3088 Highway 37 N	AA-00486	12/30/2006 SA-005222	100684			oor Field Sample		.,,	AA-CO-HV-06	#13409 Event 23; Collected from 6/2/07	7	N/A	N/A		5			0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 (	0 (
3088 Highway 37 N 3088 Highway 37 N	AA-01168 AA-01170	6/2/2007 SA-006258 6/2/2007 SA-006260	100774			or Field Sample		1, 2,	AA-HV-05 AA-HV-05-TEM	to 6/7/07; Lot #13843 Event 23; Collected from 6/2/07 to 6/7/07; Lot #12609	7	N/A	N/A		5	5	+	0	0 0	0	0 0	0	0	0 0	0 0	0	0 0	0 0	0	0 0	0	0 0	0 0	0 0
3088 Highway 37 N	AA-01173	6/2/2007 SA-006263	100774			or Field Sample			AA-CO-HV-05-TEM	Event 23; Collected from 6/2/07 to 6/7/07; Lot #12609		N/A	N/A					0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0	0 0
3088 Highway 37 N	AA-01175	6/2/2007 SA-006265	100774			or Field Sample			AA-CO-HV-05	Event 23; Collected from 6/2/07 to 6/7/07; Lot #13843	1	N/A	N/A		5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0	o 0
										Event 30; Collected from 8/18/07 to 8/23/07. Co-located																								
3088 Highway 37 N	AA-01533	8/18/2007 SA-007128	100871	Air Station	nary Outdoo	or Field Sample	SP-131925	Property	AA-HV-05	with AA-01535; Lot #14636		N/A	N/A	A 14433	6	2		0	0 0	0	0 0	0.0001	2	0 0	0	0	0 0	0	0	0 (	0	0 0	0 0	0
3088 Highway 37 N	AA-01535	8/18/2007 SA-007130	100871	Air Station	nary Outdoo	or Field Sample	SP-131925	Property	AA-CO-HV-05	Event 30; Collected from 8/18/07 to 8/23/07. Co-located with AA-01533; Lot #14636		N/A	N/A	A 14433	6	1		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0	0 0
										Event 36; Collected from 11/12																								
3088 Highway 37 N	AA-01793	11/12/2007 SA-007217	100939			or Field Sample			AA-HV-05	to 11/17/07; Lot #14636 Event 36; Collected from 11/12		N/A	N/A	A 14166	5			0	0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 0	0
3088 Highway 37 N	AA-01795	11/12/2007 SA-007219	100939	Air Station	nary Outdoo	or Field Sample	SP-131925	Property	AA-CO-HV-05	to 11/17/07; Lot #14636 Event 11; Sample collected		N/A	N/A	A 14166	5	5	+	0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 0	) 0
3501 Haul Rd	AA-01853	1/14/2008 SA-007771	100939/1009	94 Air Station	nary Outdoo	oor Field Sample	SP-134340	Property	AA-HV-05	from 1.14 to 1.19.08; Lot #14820		N/A	N/A	A 13839	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0 '	0
3501 Haul Rd	AA-01855	1/14/2008 SA-007773	100939/1009	94Air Station	nary Outdoo	or Field Sample	SP-134340	Property	AA-CO-HV-05	Event 11; sample collected from 1.14 to 1.19.08; Lot #14820	n	N/A	N/A	A 13839	5	5		0	0 0	0	0 0	0	0	0 0	0	0	0 0	0	0	0 (	0	0 0	0	0 0
	<u> </u>					<u></u>				·																								

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															ISO Concent	ration (Air=St	ructures/cc)/(D	ust=Structures	s/cm²) (Method - IS	SO 10312)						
										Exclude	d Structures		ibole (LA) ctures Detecte	ed		Exclude	d Structures		tile ( C ) ctures Detected		Ex	cluded Struct		Amphibole ( OA Structures Det		
Property Group (Location) Sample	Field Sample Data Sheet Logbook M D Parent ID Sample Date Number Number T	ledia Sample Type Type Matr	ix Category Location	Location Des	cription (las		Task	Pre Vol (Air=L) Post or Clear Area (Dust=cm²	Grid Filte	r Status Aspect Non Ratio < Le alvzed 5:1	ngth < meter > 0.5 u 0.5u	Length	Length 5 Le	ngth > Tota	I Total	Aspect Ratio <	ength < mete	er > Length	Length 5 Length	n > Total To	Asper	< Length <	Dia- meter > Len 0.5u 0.5 to	gth Length	Length > T	Total Count
(Eccation) Campie	D Tarent ID Gample Date Number Number 1	уре туре ман	ix Category Eccation	ib cample droup (our Loca	Round 4; RD #4; Maintenance shop; samples collected from	July Scellario	idak	Area (Dust=CIII	) liiga Ai	alyzeu J.1	0.5 u 0.5u	0.5 10 5 4	10 10 0	TO U COILC.	EX COURT EX	3.1	0.5 u 0.0	0.5 to 5 u	10 10 10 10 10 10 10 10 10 10 10 10 10 1	i conc. c coc	3.1	0.5 u	0.54 0.5 10	15 10 10 10	10 0 001	C. OA
378 Cabinet View Rd AA-00259	11/6/2006 SA-004212 100672 Air	Stationary Outdoo	or Field Sample SP-131928	Property AA-HV-06	11-6-06 to 11-11-06; Lot #13093	N/A		N/A 14133	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	o	0	0 0
378 Cabinet View Rd AA-00281	11/6/2006 SA-003770 100672 Air	Stationary Outdoor	Field Councils CD 424020	Property AA-CO-HV-06	Round 4; Maintenance shop; samples collected from 11-6 to 11-11-06; Lot #13093	N/A		N/A 14133	55								0									
378 Cabinet View Rd AA-00281	11/6/2006 SA-003770 100672 AIF	Stationary Outdoo	or Field Sample SP-131928	Property AA-CO-HV-06	Pumphouse; Event 5; sample	N/A		N/A 14133	55	0	0 0	0 0	U	0	0 0	0	U	0 0	0	0 0	U	0 0	0	0 0	5 0	0 0
					collected 11-16 through 11-21- 06; Con'e on FSDS sheet SA-																					
378 Cabinet View Rd AA-00287	11/16/2006 SA-005063 100673, 1006 Air	Stationary Outdoo	or Field Sample SP-131927	Property AA-HV-06	005090; Lot #13093	N/A		N/A 14226	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 (	0	0 0
378 Cabinet View Rd AA-00289	11/16/2006 SA-005083 100673, 1006 Air	Stationary Outdoor	or Field Sample SP-131927	Property AA-CO-HV-06	Pumphouse; Event 5; sample Con'd on FSDS sheet SA- 005091; Lot #13093	N/A		N/A 14415	55								0									
376 Cabinet View Ru AA-00265	11/16/2006 SA-000063 100673, 1006 All	Stationary Outdoo	or Field Sample SP-131927	Property AA-CO-HV-06	Event 16; Maintenance shop, collected from 3/18/07 to	N/A		IVA 14415	55	0	0 0	0	U	0	0 0	, 0	0	0 0	0	0 0	U	0 0			, ,	- 0 0
378 Cabinet View Rd AA-00833	3/18/2007 SA-005628 100698 Air	Stationary Outdoo	or Field Sample SP-131928	Property AA-CO-HV-05	3/23/07. Co-located with AA- 00834; Lot #13518	N/A		N/A 14171	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	o	0	0 0
070 0 1: 115					Event 16; Maintenance shop, collected from 3/18/07 to																					
378 Cabinet View Rd AA-00834 475 Fish Hatchery Rd AA-00089			or Field Sample SP-131928 or Field Sample SP-131935		3/23/07; Lot #13518 Lot #13093; Sampling date: 10/5/06-10/10/06	N/A N/A		N/A 14171 N/A 14030	55 54	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 0	0 0	0 0
475 Fish Hatchery Rd AA-00091			or Field Sample SP-131935	7.7	Lot #12609; Sampling date: 10/5/06-10/10/06	N/A		N/A 14030	53	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0	0	0 0
					Co-located with AA-00130; Lot #12264; Sampling date: 10/5/06-																					
475 Fish Hatchery Rd AA-00128	10/5/2006 SA-004788 100661, 1006 Air	Stationary Outdoo	or Field Sample SP-131935	Property AA-CO-HV-06	10/10/06 Co-located with AA-00128	N/A		N/A 14149	54	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 (	0	0 0
475 Fish Hatchery Rd AA-00130	10/5/2006 SA-004851 100661, 1006 Air	Stationary Outdoo	or Field Sample SP-131935	Property AA-CO-HV-06-TEM	10/10/06 CG; Lot #12609; Sampling date: 10/5/06- 10/10/06	N/A		N/A 14106	54	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0		0		0 0
					Event 22: Collected from																					
475 Fish Hatchery Rd AA-01146	5/24/2007 SA-006199 100772 Air	Stationary Outdoo	or Field Sample SP-131968	Property AA-CO-HV-05	5/24/07 to 5/29/07; Lot #13843 Event 22; Collected from	N/A		N/A 14221	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 (	0	0 0
475 Fish Hatchery Rd AA-01148	5/24/2007 SA-006197 100772 Air	Stationary Outdoo	or Field Sample SP-131968	Property AA-HV-05	5/24/07 to 5/29/07; Lot #13843	N/A		N/A 14157	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0	0	0 0
					Event 25; Collected from 6/26/07 to 7/1/07; Co-located																					
475 Fish Hatchery Rd AA-01305	6/26/2007 SA-006523 100819 Air	Stationary Outdoo	or Field Sample SP-131968	Property AA-HV-05	W/AA-01305; Lot #13409	N/A		N/A 14470	61	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	1	0 0	0	0 (	0	0 0
475 Fish Hatchery Rd AA-01307	6/26/2007 SA-006525 100819 Air	Stationary Outdoo	or Field Sample SP-131968	Property AA-CO-HV-05	Event 25; Collected from 6/26/07 to 7/1/07; Co-located with AA-01305; Lot #13409	N/A		N/A 14526	61	0	0 0		0	0			0	0 0	0	0 0	0	0 0		0		
TO TISH MAGNEY ITC	0.20/2007 GA-000023 100013 Pull	otationally outdoor	i led cample of -131300	Troperty 74.00 TV 00	Event 11; Sample collected from 1-21-07 to 1-26-07; 1/23	New Y		14020	01		0 0				0 0			0 0				0 0				
501 Mineral Ave AA-00564	1/21/2007 SA-005314 100686 Air	Stationary Outdoo	or Field Sample SP-131923	Property AA-HV-06	AM fire @ 808 Michigan Ave; Lot #13409	N/A		N/A 14322	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0	0	0 0
					Event 11; Sample collected from 1-21-07 to 1-26-07; 1/23																					
501 Mineral Ave AA-00568	1/21/2007 SA-005200 100686 Air	Stationary Outdoo	or Field Sample SP-131923	Property AA-CO-HV-06	AM fire @ 808 Michigan Ave; Lot #13409	N/A		N/A 14322	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0	0	0 0
501 Mineral Ave AA-01231	6/13/2007 SA-006384 100793 Air	Stationary Outdoo	or Field Sample SP-131923	Property AA-HV-05	Event 24; Collected from 6/13/07 to 6/18/07; Lot #13843	N/A		N/A 14523	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0	0 0	0 0
50.45					Event 24; Collected from				55																	
501 Mineral Ave AA-01233	6/13/2007 SA-006442 100793 Air	Stationary Outdoo	or Field Sample SP-131923	Property AA-HV-05-TEM	6/13/07 to 6/18/07; Lot #12609 Event 24; Collected from	N/A		N/A 14393	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 0	0	0 0
501 Mineral Ave AA-01236	6/13/2007 SA-006445 100793 Air	Stationary Outdoo	or Field Sample SP-131923	Property AA-CO-HV-05-TEM	6/13/07 to 6/18/07; Lot #12609	N/A		N/A 14455	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 '	0	0 0
501 Mineral Ave AA-01238	6/13/2007 SA-006447 100793 Air	Stationary Outdoo	or Field Sample SP-131923	Property AA-CO-HV-05	Event 24; Collected from 6/13/07 to 6/18/07; Lot #13843	N/A		N/A 14455	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0	0	0 0
					Event 28; Collected from 7-27- 07 to 8-1-07; CO-Located With																					
501 Mineral Ave AA-01449	7/27/2007 SA-006880 100838 Air	Stationary Outdoo	or Field Sample SP-131923	Property AA-HV-05	AA-01451; Lot #14166 Event 28; Collected from 7-27-	N/A		N/A 14814	55	0	0 0	0 0	0	0	0 1	0	0	0 0	0	0 0	0	0 0	0	0	0	0 0
501 Mineral Ave AA-01451	7/27/2007 SA-006882 100838 Air	Stationary Outdoo	or Field Sample SP-131923	Property AA-CO-HV-05	07 to 8-1-07; co-located w/ AA- 01449; Lot #14166	N/A		N/A 14814	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	1	0 0	0	0	0 0	0 0
					Event 34; co-located w/AA-																					
501 Mineral Ave AA-01770	10/1/2007 SA-007641 100900 Air	Stationary Outdoo	or Field Sample SP-131923	Property AA-CO-HV-05	01749; Collected from 10/1/07 to 10/6/07; Lot #14820	N/A		N/A 14143	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0	0	0 0
501 Mineral Ave AA-01789	11/12/2007 SA-007213 100939 Air	Stationary Outdoo	or Field Sample SP-131923	Property AA-HV-05	Event 36; Collected from 11/12 to 11/17/07; Lot #14636	N/A		N/A 14208	55	0	0 0	0 0	0	o	0 0	0	0	0 0	0	0 0	0	0 0	0	o	0	0 0
					Event 7; Samples collected from 12/9 to 12/14/06.																					
60 Port Blvd AA-00421	12/9/2006 SA-005140 100678 Air	Stationary Outdoo	or Field Sample SP-131926	Property AA-HV-06	Continued on FSDS SA- 005190; Lot #13093 Event 7; Samples collected	N/A		N/A 14169	54	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0.0001	2	0 0	0	0	0 0	0 0
					from 12/9 to 12/14/06. Continued on FSDS SA-																					
60 Port Blvd AA-00426	12/9/2006 SA-005145 100678 Air	Stationary Outdoo	or Field Sample SP-131926	Property AA-CO-HV-06	005194; Lot #13093	N/A		N/A 14248	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0 (	0	0 0
60 Port Blvd AA-01022	4/20/2007 SA-005883 100717 Air	Stationary Outdoo	or Field Sample SP-131926	Property AA-HV-05	Event 19; Collected from 4/20/07 to 4/25/07; Lot #13843	N/A		N/A 14211	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0	0 0	0 0
60 Port Blvd AA-01024	4/20/2007 SA-005885 100717 Air	Stationary Outdoo	or Field Sample SP-131926	Property AA-CO-HV-05	Event 19; Collected from 4/20/07 to 4/25/07; Lot #13843	N/A		N/A 14211	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0		0		0 0
899 Farm to Market Rd AA-00132			or Field Sample SP-131932		Collected 10/27/06 to 11/1/06; Lot #13093	N/A		N/A 14956	55	0	0 0	0 0	0	0	0 0	0	0 0.0	001 0	0	0 0.0001	2	0 0	0	0	0	0 0
					Continued on SA-005013: Collected on 10-16-06 to 10-21-								_				_									
899 Farm to Market Rd AA-00161	10/16/2006 SA-004928 100663 Air	Stationary Outdoo	or Field Sample SP-131932	Property AA-HV-06	06 Lot #13093  Event 13; Collected from	N/A		N/A 14027	59	0	0 0	0	0	0	υ 0	0	0	υ 0	0	0 0	U	0 0	0	U (	0	0 0
899 Farm to Market Rd AA-00708	2/14/2007 SA-005481 100688 Air	Stationary Outdoo	or Field Sample SP-131932	Property AA-HV-05	2/14/07 to 2/19/07; Co-located with AA-00712; Lot #13518	N/A		N/A 14354	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0	0	0 0
					Event 13; Collected from																					
899 Farm to Market Rd AA-00712	2/14/2007 SA-005485 100688 Air	Stationary Outdoo	or Field Sample SP-131932	Property AA-CO-HV-05	2/14/07 to 2/19/07; Co-located w/AA-00708; Lot #13518	N/A		N/A 14354	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0	0 0	0 0
899 Farm to Market Rd AA-00714	2/14/2007 SA-005487 100688 Air	Stationary Outdoo	or Field Sample SP-131932	Property AA-HV-05-TEM	Event 13; Collected from 2/14/07 to 2/19/07; Lot #12609	N/A		N/A 14281	54	0	0 0	0 0	0	0	0 1	0	0	0 0	0	0 0	0	0 0		0		0 0
751.00714		January Saide	0. 101302	4	Event 13; Collected from				1			Ť			Ť									1		
899 Farm to Market Rd AA-00716	2/14/2007 SA-005489 100688 Air	Stationary Outdoo	or Field Sample SP-131932	Property AA-CO-HV-05-TEM	2/14/07 to 2/19/07; Co-located w/ AA-00714; Lot #12609	N/A		N/A 14282	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0	0	0 0
899 Farm to Market Rd AA-01066	5/2/2007 SA-006009 100746 Air	Stationary Outdoo	or Field Sample SP-131932	Property AA-HV-05	Event 20; Collected from 5/2/07 to 5/7/07; Lot #13843	N/A		N/A 14300	55	0	0 0	0 0	0	0	0 0	0	0	0 0	0	0 0	0	0 0	0	0	0	0 0

																											ISO Concen	tration (Air=S	tructures/cc	:)/(Dust=Str	uctures/cm2)	(Method - I	SO 10312)								
																							Libby	Amphibole	(LA)						Chrysotile ( C						Oth	er Amphibol	e(OA)		
																						ded Structure	es	Structures	Detected			Exclud	ed Structure	es	Structures	Detected			Excl	uded Structu	ıres	Structure	s Detected	i	
Property Group (Location)	Sample ID	Parent ID	Sample Date	Field Sample Data Sheet Number	Logbook Number	Media Type	Sample Type		x Catego	ry Loca	cation ID S	ample Grou	Location Description (Sub Location)	Field Comments	SSN (last 4 digits)	Scenario	Pre Post Clear	Vol (Air=L) or Area (Dust=cm²)	Open	Iter Status Non Analyzed	Ratio <	Length < r	Dia- neter > Len 0.5u 0.5 to	ngth Lengt o 5 u to 10	h 5 Length	> Total Conc. L	Total	Aspect Ratio < 5:1	Length < n	Dia- neter > Lo 0.5u 0.5	ength Leng	th 5 Lengt 0 u 10	h > Total u Conc.	Total	Aspect Ratio < C 5:1	Length < 0.5 u	Dia- meter > 1 0.5u 0.	Length Ler 5 to 5 u to	ngth 5 Len	gth > To	Total otal Count nc. OA OA
899 Farm to Market Rd	AA-01073		5/2/2007	SA-006018	100746	Air	Stationary	Outdoo	r Field Samp	le SP-13	31932 P	roperty	AA-CO-HV-05	Event 20; Collected from 5/2/07 to 5/7/07; Lot #13843		N/A	N/A	14300	55		0	0	0	0	0	0	0 (	0	0	0	0	0	0	0	0 (	0	0	0	0	0	0 0
Corner of Snowshoe Dr & Woodland Heights Rd	AA-00897		3/29/2007	SA-005677	100699	Air	Stationary	/ Outdoo	r Field Samp	ile SP-13	31930 P	roperty	AA-HV-05	Event 17; Collected from 3/29/07 to 4/3/07; Lot #13518		N/A	N/A	14292	55		0	0	0	0	0	0	0 (	0 0	0	0	0	0	0	0	0 (	0	0	0	0	0	0 0
Corner of Snowshoe Dr & Woodland Heights Rd	AA-00899		3/29/2007	SA-005679	100699	Air	Stationary	/ Outdoo	r Field Samp	ile SP-13	31930 P	roperty	AA-CO-HV-05	Event 17; Collected from 3/29/07 to 4/3/07; Co-located w/AA-00897; Lot #13518		N/A	N/A	14292	100		0	0	0	0	0	0	0 (	0	0	0	0	0	0	0	0 0	0	o	0	0	0	0 0
J. Neils Park	AA-01494		8/7/2007	SA-007036	100854	Air	Stationary	/ Outdoo	r Field Samp	ile SP-132	32298 P	roperty	AA-HV-05	Event 29; Collected from 8/7/07 to 8/12/07; Lot #14166		N/A	N/A	14449	56		0	0	0	0	0	0	0 (	0	0	0	0	0	0	0	0 (	0	0	0	0	0	0 0
J. Neils Park	AA-01496		8/7/2007	SA-007038	100854	Air	Stationary	/ Outdoo	r Field Samp	ile SP-132	32298 P	roperty	AA-CO-HV-05	Event 29; Collected from 8/7/07 to 8/12/07; co-located w/AA- 01494; Lot #14166		N/A	N/A	14449	55		0	0	0	0	0	0	0	1 0	0	0	0	0	0	0	0 0	0	0	0	0	0	0 0
J. Neils Park	AA-01542		10/22/2007	SA-007011	100900	Air	Stationary	/ Outdoo	r Field Samp	ile SP-132	32298 P	roperty	AA-HV-05	Event 35; Collected from 10/22/07 to 10/27/07; Lot #14820		N/A	N/A	14192	55		0	0	0	0	0	0	0 (	0 0	0	0	0	0	0	0	0 (	0	0	0	0	0	0 0
J. Neils Park	AA-01544		10/22/2007	SA-007013	100900	Air	Stationary	/ Outdoo	r Field Samp	ile SP-132	32298 P	roperty	AA-CO-HV-05	Event 35; Collected from 10/22/07 to 10/27/07; co- located w/ AA-01542; Lot #14820		N/A	N/A	14192	55		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	0	0	0	0	0	0 0

## Appendix F Ambient Air Preparation (Drying) Blank Sample Results as of February 18, 2008

pendix F -Am	bient Air P	reparatio	on (Drying	g) Blank S	Sample Re	estuls a	as of Febr	uary 18	3, 2008																														.		.
e: The report e	xcludes all l	_ab QC res	sults, such	as those a	ssociated v	with Lat	b Blanks, La	ab Dupli	cates, Re-	Preparation	n, Re-count	Same, F	Re-count Different, Verified	Analysis, etc.																											
																											ISO	Concentra	tion (Air=S	ructures/cc)	/(Dust=Struct			10312)							
																									nphibole ( L							ysotile (C)						Other Amph			
																		II _ II .				Excluded S			tructures De	tected		L	Exclud	ed Structure	s	Structures D	tected	4 7		Excluded Structu	ures	Stru	ctures Detec	ted	/
Property Group (Location)	Sample ID	Parent ID	Sample Date	Field Samp Data Shee Number	t Logbook		lia Sample	Matrix	Catego	ry Locat	on ID Sample	Group	Location Description (Sub Location)	Field Comments	SSN (last 4 digits)	Scenario	Task	Post	Vol (Air=L) or a (Dust=cm²)	Open	Non Ra		th < mete		h Length 5	Length >	Total Conc. LA	Total	Aspect Ratio < 5:1	Length < m	eter > Leng	th Length	5 Length	> Total	Total F	Ratio < Length < 5:1 0.5 u	meter >	Length	Length 5	ength >	Total
(2000)	AA-00138		11/1/2006	SA-004195	100669	Air	Stationary	N/A		- Dry AD-000		Dryi	ying blank	Drying blank; Lot #13093	57	N/A		N/A	a (Daot=o )	55	naiyzou	0	0	0	0 (	0	0	0	0	0	0	0	0	0 0	0	0 0	(	0 (	0	0	0
	AA-00276		11/10/2006	SA-004429	100672	Air	Stationary	N/A	Prep Blank	- Dry AD-000	I01 Blank	Prep	ep-Dry Blank	Lot #13093; Round 4		N/A		N/A		55		0	0	0	0 (	0	0	0	0	0	0	0	0	0 0	0	0 0	, ,	0 (	0	0	0
														Event 5; Prep Blank-Dry; Lot																						- 1					
	AA-00280		11/21/2006	SA-004713	100674	Air	Stationary	N/A	Prep Blank	- Dry AD-000	01 Blank	Prep	ep Blank-Dry	#13093		N/A		N/A		55		0	0	0	0 (	0	0	0	0	0	0	0	0	0 0	0	0 0	c	) (	0	0	
	AA-00392		12/13/2006	SA-005111	100678	Air	Stationary	N/A	Prep Blank	- Dry AD-000	101 Blank	Prep	ep Blank-Dry	Event 7; Prep Blank-Dry; Lot #13093		N/A		N/A		55		0	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0 0	,	0 (	. 0	0	. 0
	AA-00394		12/14/2006	SA-005113	100679	Air	Stationary	N/A	Prep Blank	- Dry AD-000	I01 Blank	Prep	ep Blank-Dry	Event 7; Lot #13093		N/A		N/A		55		0	0	0	0 (	0	0	0	0	0	0	0	0	0 0	0	0 0	, ,	0 (	0	0	0
	AA-00470		12/22/2006	SA-005202	100000	Air	Stationary	N/A	Drop Blook	- Dry AD-000	IO1 Blank	Pror	ep Blank-Dry	Event 8; Prep Blank-Dry; Lot #13409		N/A		N/A		EE		0	0	0	0 (		0	0	0	0	0	0	0	0	0	0 6	, ,			0	
	AA-00470		12/22/2000	3A-003202	100002	All	Stationary	IN/A	Frep Blank	- DIY AD-000	UI BIAIR	1 10	ер ыапк-ы у	Event 8; Prep Blank-Dry; Lot		IN/A		IN/A		33		- 0	U	- 0	0 (	0	U	U	U	- 0	0	U	-	4		0 0	<b>⊢</b> —"	4 0			
	AA-00483		12/24/2006	SA-005208	100682	Air	Stationary	N/A	Prep Blank	- Dry AD-000	I01 Blank	Prep	ep Blank-Dry	#13409		N/A		N/A		55		0	0	0	0 (	0	0	0	0	0	0	0	0	0 0	0	0 0	, ,	o (	0	0	0
	AA-00513		1/4/2006	SA-005255	100684	Air	Stationary	N/A	Prep Blank	- Dry AD-000	01 Blank	Prep	ep Blank- Dry	Event 9; Prep Blank-Dry; Lot #13409		N/A	·	N/A		55		0	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0 0	, ,	0 (	. 0	0	0
-	AA 00E14		1/5/2007	CA 005257	100694	A1-	Ctationon		Drop Blook				on Blank-Dry	Event 9; Prep Blank-Dry; Lot		l																									

## Appendix G OU1 Equipment Blank Sample Results as of April 27, 2007

### Appendix G - OU1 Equipment Blank Data as of April 27, 2007

Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

											P	LM		
Sample ID	Parent ID		Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	Method	LA Bin		LA (%)	C (%)
CS-16697-FG		N/A	NA	Blank	NA	Soil-Like	Soil	Equipment Blank	9/9/2003	PLM-VE	Α	ND		ND
CS-16822-FG		N/A	NA	Blank	NA	Soil-Like	Soil	Equipment Blank	9/10/2003	PLM-VE	Α	ND		ND
CS-16847-FG		N/A	NA	Blank	NA	Soil-Like	Soil	Equipment Blank	9/12/2003	PLM-VE	Α	ND		ND
CS-16863-FG		N/A	NA	Blank	NA	Soil-Like	Soil	Equipment Blank	9/13/2003	PLM-VE	Α	ND		ND

## Appendix H Modifications to Governing Documents

### Appendix H Details Regarding Modifications to Governing Documents

#### Phase 1 SQAPP, Revision 0 (EPA 1999)

No deviations to procedures outlined in this document were noted.

#### Phase 1 SQAPP, Revision 1 (EPA 2000a)

- Effective August 29, 2001: To decontaminate air and dust sampling equipment, locally available filtered water will be used rather than deionized water.
- Effective August 30, 2001: On field sample data sheets, separate 10-digit and 6-digit sample identifiers (IDs) will not be used to label samples; rather, only the 6-digit (e.g., 1-XXXXX) ID will be used.
- Effective December 4, 2001: Rotometer calibration will be conducted once per month rather than once per week as stated in standard operating procedure (SOP) EPA-Libby-01, Revision 1.
- Effective December 4, 2001: Since the procedure for completing field sample data sheets (SOP ISSI-Libby-04) was omitted from the guidance document, field sample data sheets will be completed using examples prepared and maintained in the field by the field manager.
- Effective December 10, 2001: EPA-approved chain-of-custody (COC) forms specific to asbestos sampling will be used rather than the standard COC form provided in the SOP for sample custody and handling (CDM SOP 1-2).
- Effective December 10, 2001: Sample labels will only contain the sample ID number rather than detailed information (e.g., sample date, sample time, etc.).
- Effective December 10, 2001: Soil samples will not be collected in pans, trays, or bowls as required by CDM SOP 1-3 (Surface Soil Sampling); rather, material will be placed directly into plastic zip-top bags and homogenized. Core samplers or bulb planters will be used when necessary to collect subsamples of approximately equal volume. In addition, ice will not be used for packaging.
- Effective December 10, 2001: As stated in CDM SOP 2-1 (Packaging and Shipping of Environmental Samples), asbestos samples (all media) will not be packaged for handling or shipment using vermiculite or ice.
- Effective December 10, 2001: Locally available deionized water will be used to decontaminate sampling implements and equipment (e.g., air sampling pumps, trowels, bulb planters, etc.) rather than deionized water, as stated in CDM's SOP for Field Equipment Decontamination at Nonradioactive Sites (CDM SOP 4-5). In addition, waste water will be disposed of onsite and not captured.

■ Effective December 10, 2001: Dust samples will be collected over three 100-square centimeter (cm²) areas rather than a single 100-cm² area as called for by the American Society for Testing and Materials method D5755-95.

#### Removal Action SAP, Revision 1 (EPA 2000b)

- Effective December 4, 2001: Rotometer calibration will be conducted once per month rather than once per week as stated in SOP EPA-Libby-01, Revision 1.
- Effective December 10, 2001: Meteorological station data will only be collected at critical removal actions, as deemed by the government.

#### Final Remedial Investigation and Removal Action Work Plan for Riverside Park (CDM 2003a)

- Vermiculite was observed in one soil subsample location; therefore, only four subsamples were collected rather than five.
- Four proposed riverbank sample locations were not sampled due to visible vermiculite.
- One offset test pit was not excavated due to its proximity to another test pit.
- One offset test pit was excavated at a 30-foot interval versus the required 50-foot interval due to interference by fiber optic cable marking.
- One offset test pit was not excavated because the offset location was in the Kootenai River.

#### OU4 Ambient Air SAP (CDM and SRC 2006)

■ Effective September 9, 2007: The sampling frequency and number of sampling locations was reduced for the OU4 Libby Site-wide ambient air monitoring locations.

## Appendix I Exposure Questionnaires

Appendix I-1 Exposure Questionnaire - OU1 Former Export Plant Search and Rescue Volunteers

			As Rep	ported	Adjust	ed (a)	As Rej	oorted	Adjust	ed (a)										Calculate	ed Values				
				Time		Time		% Indoor Time		% Indoor Time	Time Indoor	Time Indoor						ET	ET	ET			TWF	TWF	TWF
Survey	EF at OU1 (days/yr)	ET at OU1 (hours/day)	Time Indoors (%)	Outdoors (%)	Time Indoors (%)	Outdoors (%)	% Indoor Time in Garage	in Meeting Room	% Indoor Time in Garage	in Meeting Room	meeting room active (%)	meeting room passive (%)	Start age	Stop age reported	Stop age assumed (b)	ET (outdoor)	ET (indoor)	(meeting room - active)	(meeting room - passive)	(garage - active)	TWF (outdoor)	TWF (indoor)	(meeting room - active)	(meeting room - passive)	(garage - active)
1	45	2	75%	25%	75%	25%	25%	75%	25%	75%	5%	95%	36	60	60	0.50	1.50	0.06	1.07	0.38	2.6E-03	7.7E-03	2.9E-04	5.5E-03	1.9E-03
2	60	2	25%	60%	29%	71%	10%	20%	33%	67%	5%	95%	60	68	68	1.41	0.59	0.02	0.37	0.20	9.7E-03	4.0E-03	1.3E-04	2.6E-03	1.3E-03
3	35	4	10%	90%	10%	90%	10%	90%	10%	90%	5%	95%	25	100	80	3.60	0.40	0.02	0.34	0.04	1.4E-02	1.6E-03	7.2E-05	1.4E-03	1.6E-04
4	104	2	75%	25%	75%	25%	25%	75%	25%	75%	50%	50%	50	80	80	0.50	1.50	0.56	0.56	0.38	5.9E-03	1.8E-02	6.7E-03	6.7E-03	4.5E-03
5	50	2	85%	15%	85%	15%	25%	75%	25%	75%	10%	90%	35	65	65	0.30	1.70	0.13	1.15	0.43	1.7E-03	9.7E-03	7.3E-04	6.5E-03	2.4E-03
6	100	2	80%	20%	80%	20%	40%	60%	40%	60%	5%	95%	40	60	60	0.40	1.60	0.05	0.91	0.64	4.6E-03	1.8E-02	5.5E-04	1.0E-02	7.3E-03
7	25	3	80%	20%	80%	20%	25%	70%	26%	74%	50%	50%	37	?	70	0.60	2.40	0.88	0.88	0.63	1.7E-03	6.8E-03	2.5E-03	2.5E-03	1.8E-03
8	35	4	80%	20%	80%	20%	20%	80%	20%	80%	0%	100%	22	100	80	0.80	3.20	0.00	2.56	0.64	3.2E-03	1.3E-02	0.0E+00	1.0E-02	2.6E-03
9	20	2	90%	10%	90%	10%	50%	50%	50%	50%	10%	90%	41	90	80	0.20	1.80	0.09	0.81	0.90	4.6E-04	4.1E-03	2.1E-04	1.8E-03	2.1E-03
10	42	4	80%	20%	80%	20%	10%	90%	10%	90%	20%	80%	49	65	65	0.80	3.20	0.58	2.30	0.32	3.8E-03	1.5E-02	2.8E-03	1.1E-02	1.5E-03
11	30	2	90%	10%	90%	10%	10%	80%	11%	89%	2%	98%	55	67	67	0.20	1.80	0.03	1.57	0.20	6.8E-04	6.2E-03	1.1E-04	5.4E-03	6.8E-04
12	120	2	95%	5%	95%	5%	25%	75%	25%	75%	2%	98%	48	60	60	0.10	1.90	0.03	1.40	0.48	1.4E-03	2.6E-02	3.9E-04	1.9E-02	6.5E-03
13	104	4	70%	30%	70%	30%	90%	10%	90%	10%	90%	10%	65	90	80	1.20	2.80	0.25	0.03	2.52	1.4E-02	3.3E-02	3.0E-03	3.3E-04	3.0E-02
14	60	2	60%	40%	60%	40%	40%	60%	40%	60%	5%	95%	32	70	70	0.80	1.20	0.04	0.68	0.48	5.5E-03	8.2E-03	2.5E-04	4.7E-03	3.3E-03
15	100	1	80%	20%	80%	20%	30%	70%	30%	70%	10%	90%	30	70 ?	70	0.20	0.80	0.06	0.50	0.24	2.3E-03	9.1E-03	6.4E-04	5.8E-03	2.7E-03
16	30	2	70%	30%	70%	30%	20%	80%	20%	80%	5%	95%	25	55 or more	55	0.60	1.40	0.06	1.06	0.28	2.1E-03	4.8E-03	1.9E-04	3.6E-03	9.6E-04
17	300	2	99%	1%	99%	1%	1%	99%	1%	99%	0%	100%	46	?	70	0.02	1.98	0.00	1.96	0.02	6.8E-04	6.8E-02	0.0E+00	6.7E-02	6.8E-04
18	36	4	30%	70%	30%	70%	18%	65%	22%	78%	0%	100%	14	NA	70	2.80	1.20	0.00	0.94	0.26	1.2E-02	4.9E-03	0.0E+00	3.9E-03	1.1E-03
	y Statistics				, ,							ı		ı											
Mean	72	2.6	71%	28%	71%	29%	26%	68%	28%	72%	15%	85%	39	75	69	0.84	1.72	0.16	1.06	0.50	4.80E-03	1.44E-02	1.03E-03	9.37E-03	3.97E-03
Min	20	1.0	10%	1%	10%	1%	1%	10%	1%	10%	0%	10%	14	60	55	0.0	0.4	0.0	0.0	0.0	4.57E-04	1.60E-03	0.00E+00	3.32E-04	1.60E-04
Max	300	4.0	99%	90%	99%	90%	90%	99%	90%	99%	90%	100%	65	100	80	3.6	3.2	0.9	2.6	2.5	1.44E-02	6.78E-02	6.68E-03	6.71E-02	2.99E-02
Stdev	65	1.0	25%	23%	24%	24%	20%	23%	20%	20%	24%	24%	14	15	8.0	0.9	0.8	0.3	0.7	0.6	4.59E-03	1.57E-02	1.72E-03	1.51E-02	6.76E-03
95th	147	4.0	96%	73%	96%	74%	56%	91%	56%	91%	56%	100%	20.8 (c)	100	80	2.92	3.20	0.62	2.34	1.14	1.43E-02	3.84E-02	3.54E-03	2.63E-02	1.07E-02

Notes:

NA = not available
a) Cells highlighted in pink are cases where the values on proportion of time spent in two location categories do not sum to 100% as expected. In these cases, the reported values were re-scaled to sum to 100% while maintaining the ratio of the values reported
b) Three respondents did not indicate an expected age at stop. An age of 70 was assumed in these cases.
c) 5th percentile value rather than 95th percentile

## Appendix I-2 Exposure Questionnaire - OU1 Former Export Plant Fishing Guides

Respondent	# Trips/year launched from	Minutes per launch	Months typically	conducting trips	Comments	# of months conducting fishing	Start	Stop	Activity description for
Respondent	Riverside Park	or take out	Start	End	Comments	trips from Riverside Park	(age)	(age)	Riverside Park
1	200	15	April	November	Heaviest June-September; does occiassional trips in winter.	8	23	Lifelong	Back truck & trailer down ramp and unload or load boats.
2	100	20	June	October	NA	5	25	Lifelong	Back truck & trailer down and load or unload boat.
3 (a)	45	NA	NA	NA	Heaviest June-September; does occiassional trips in winter.	8	NA	Lifelong	NA
4 (a)	45	NA	NA	NA	NA	8	NA	Lifelong	NA
5 (b)	100	NA	NA	NA	NA	5	NA	Lifelong	NA
6 (b)	100	NA	NA	NA	NA	5	NA	Lifelong	NA
7 (b)	100	NA	NA	NA	NA	5	NA	Lifelong	NA
8 (b)	100	NA	NA	NA	NA	5	NA	Lifelong	NA

- (a) Respondent 1 indicated that two other guides working for the same company ran 45 trips per year, and that the activity was expected to be lifelong
- (b) Respondent 2 indicated that four other guides working for the same company ran 100 trips per year, and that the activity was expected to be lifelong

NA = not available

#### **Summary Statistics**

Statistic	# Trips/year launched from Riverside Park	Minutes per launch or take out	# of months conducting fishing trips from Riverside Park	Start (age)
Mean	99	17.5	6.1	04.0
Mican	99	17.5	0.1	24.0
Min	45	17.5	5	23
		_	_	

# Appendix I-3 Exposure Questionnaire - OU1 Former Export Plant City Workers

Survey #	EF at OU1 (days/yr)	ET at OU1 (hr/day) (a)	Fraction of Time Outdoors (%)	Activity Outdoors	Start age	Stop age
1	261	2.12	100%	Mowing park area (1 hr/week); weed trimming field (8 hrs, 3x per year); plowing; spreading gravel (8 hrs/year); garbage removal (1hr/week).	NA	NA
2 (6 employees)	NA	NA	NA	Installing new sprinkler system in 2008; replacing water pipes that run from river to pavement in 2008; snow plows in winter; possibly adding bathrooms/expanion/move road.	NA	NA

NA = not available

(a) Calculated from description of activities